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ALIGNMENTS

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N,Alternate names: Cachectin; TNF alpha C;Species: Rattus norvegicus (Norway rat) C;Date: 07-Jun-1990 #sequence revision 07-Jun-1990 # C;Accession: JU0029; JN0868; 531674 R;Shirai, T.; Shimizu, N.; Horiguchi, S.; Ito, H. Agric. Biol. Chem. 53, 1733-1736, 1989 A;Title: Cloning and expression in Escherichia coli A;Reference number: JU0029 A;Accession: JU0029 A;Accession: JU0029 A;Residues: 1-235 <SHI> R;Kwon, J.; Chung, I.Y.; Benveniste, E.N. Gene 132, 227-236, 1993 A;Title: Cloning and sequence analysis of the rat tumor necrosis factor-encoding genes. A;Reference number: JN0868; MUID:94040766; PMID:8224868 A;Accession: JN0868 A;Introns: 62/3; 81/1; 97/1 C;Superfamily: tumor necrosis factor C;Superfamily: tumor necrosis factor C;Keywords: cytotine; cytotoxin; glycoprotein; lipoprotein; lymphokine; macrophage; membi F;80-235/Product: tumor necrosis factor #status predicted <MAT> F;90-235/Product: tumor necrosis factor #status predicted F;91-20/Binding site: myristate (Eys) (covalent) #status predicted F;84/Binding site: carbohydrate (Ser) (covalent) #status predicted F;86/Binding site: carbohydrate (Asn) (covalent) #status predicted F;148-179/Disulfide bonds: #status predicted A;Molecule type: DNA A;Residues: 1-235 <KWO> A;Residues: 1-235 <KWO> A;Cross-references: GB:L00981; NID:9205253; PIDN:AAA16275.1; PID:9205254 A;Cross-references: GB:Molecular Riberton Residues: R;Estler, H.C.; Grewe, M.; Gaussling, R.; Pavlovic, M.; Decker, K. Biol. Chem. Hoppe-Seyler 373, 271-281. Biol. Chem. Hoppe-Seyler 373, 271-281. A;Title: Rat tumor necrosis factor-alpha. Transcription in rat Kupffer c A;Reference number: S21674; MUID:92329007; PMID:1627266 A;Molecule type: mRNA A;Residues: 1-38,'p',40-162,'T',164-201,'S',203-235 <EST> A;Cross-references: GB:X66539; GB:S40199; NID:g395369; PIDN:CAA47146.1; C;Comment: Tumor necrosis factor is secreted by macrophages in response tumor necrosis factor alpha precursor -A;Gene: TNF-alpha A; Accession: S21674 A; Molecule type: DNA Query Match Best Local S Matches 32 60 54; Similarity ĆĹSLFŚFLLVÄGATTLFCLLNFGVIGPNKEEKFPNG-----LPLISSMAQTLTLR-----CLIVVSFYQVAALQGDLASLRAELQG-HHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPP Conservative 7.6%; 45; Score 110.5; DE Pred. No. 0.057; Mismatches rat DB 2; 87; #text_change of the Indels Length in rat Kupffer cells and gene for rat tumor necrosis 57; 04-Feb-2000 Gaps PID:g395370 to endotoxin 81 in vitro

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tumor necrosis factor alpi
C,Species: Felis silvestr
C,Date: 21-Nov-1993 #sequ
C,Accession: S1168
R,MCGraw, R.A.; Coffee, B
                                                                       tumor necrosis factor alpha precursor - N/Alternate names: cachectin; TNF alpha C/Species: Mus musculus (house mouse) C/Date: 31-Mar-1988 #semmence remision of
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                    C;Species: Mus musculus (house mouse)
C;Date: 31-Mar-1988 #sequence revision 31-Mar-1988 #t
C;Accession: A22908; S03791; Ā27303; A25164; A23127;
R;Shirai, T.; Shinizu, N.; Shiojiri, S.; Horiguchi, S
DNA 7, 193-201, 1988
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Nucleic Acids Res. 18, 5563, 1990
A;Tille: Gene sequence of feline tumor necrosis factor alpha
A;Reference number: S11688; MUID:91016860; PMID:2216740
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;Residues: 1-233 <MCG>
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Best Local
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Species: Felis silvestris catus (domestic
Date: 21-Nov-1993 #sequence_revision 10-Nov
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7; A34251; I59058; A36696
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A;Note: the first intron occurs in the 5'-untranslated region C;Superfamily: tumor necrosis factor C;Superfamily: tumor necrosis factor (C;Keywords: cytchine; cytchine; dlycoprotein; lipoprotein; lymphokine; F;80-235/product: tumor necrosis factor #status experimental <MAT>
                                                                                                                                                                                                                                                                                                                                                     A;Molecule type: mRNA
A;Residues: 1-230, 'R, '32-235 <RES>
A;Residues: 1-230, 'R, '32-235 <RES>
A;Cross-references: GB:M13049; NID:g202082; PIDN:AAA40457.1; PII
A;Chens H; Jue, D.M.; Zentella, A.; Cerami, A.
Biochem. Biophys. Res. Commun. 173, 1072-1078, 1990
A;Title: Characterization of high molecular weight glycosylated A;Reference number: A36696; MUID:91097531; PMID:2268312
A;Accession: A36696
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A;Cross-references: GB:Y00467; NID:g54830; PIDN:CAA68530.1; PID:R;Pennica, D.; Hayflick, J.S.; Bringman, T.S.; Palladino, M.A.; Proc. Natl. Acad. Sci. U.S.A. 82, 6660-6664, 1985
A;Title: Cloning and expression in Bscherichia coli of the cDNA A;Reference number: A25164; MUID:85298296; PMID:3898078
      F;20/Binding site: myristate (Lys) (covalent) #status predicted F;84/Binding site: carbohydrate (Ser) (covalent) #status predicted F;86/Binding site: carbohydrate (Asn) (covalent) #status predicted F;148-179/Disulfide bonds: #status predicted
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A;Residues: 70-87 <CSS>
R;Caput, D., Beutler, B.; Hartog, K.; Thayer, R.; Brown-Shimer,
R;Caput, D., Beutler, B.; Hartog, K.; Thayer, R.; Brown-Shimer,
Proc. Natl. Acad. Sci. U.S.A. 83, 1670-1674, 1986
A;Title: Identification of a common nucleotide sequence in the 3
A;Reference number: I59058, MUID:86149365; PMID:2419912
A;Accession: I59058
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A;Title: Molecular cloning of mouse tumour necrosis factor cla;Reference number: A23127; MUID:85242112; PMID:2989794
A;Accession: A23127
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A; Residues: 80-85,
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A;Title: Alternative cleavage of the cachec
A;Reference number: A34251; MUID:89380231;
A;Accession: A34251
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A; Residues: 1-235 <FRA>
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A; Residues: 1-235 < PEN>
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Nucleic Acids Res. 15, 9083-9084, 1987
A;Title: Nucleotide sequence of the murine TNF locus, including R;Reference number: A93679; MUID:88067722; PMID:3684584
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R;Shakhov, A.N.; Nedospasov, S.A.
Bioorg. Khim. 13, 701-705, 1987
A;Title: Molecular cloning of the genes coding for tumor
A;Reference number: S03791; MUID:87298639; PMID:3040015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Status: preliminary; translated
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A;Residues: 1-235 <SHI>
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A;Accession: A22908
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5,'X',87-99
#status predicted
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80231; PMID:2777790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GB/EMBL/DDBJ
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der Heyden,
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Query Match

Score 109.5;

DB 1;

Length

Query Match 7.4%; Score 10%; DB 1; Length 233; Best Local Similarity 22.8%; Pred. No. 0.092; Matches 56; Conservative 42; Mismatches 88; Indels 60; Gaps 12; 8 SC-CLTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAEKAGLEEAPAVTAGLKIFE 116 9 SCLCLSLFSFLLVAGATTLFCLLHFGVIGPOREESPGGPSINS71 CY 117 PPAPGEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPMLLSFXRGS 176 1	RESULT 4 S24642 tumor necrosis factor alpha precursor - bovine C;Species: Bos primigenius taurus (cattle) C;Cokine 5, 36-341, 193 R;Cludts, I.; Cleuter, Y.; Kettmann, R.; Burny, A.; Droogmans, L. Cytokine 5, 336-341, 1993 A;Cludts, I.; Cleuter, Y.; Kettmann, R.; Burny, A.; Droogmans, L. Cytokine 5, 336-341, 1993 A;Title: Cloning and characterization of the tandemly arranged bovine lymphotoxin and tu A;Reference number: 146046; MUID:94083525; PMID:8260599 A;Title: Cloning and characterization of the tandemly arranged bovine lymphotoxin and tu A;Reference number: 146046; MUID:94083525; PMID:8260599 A;Accession: 146047 A;Reference number: 146046; MUID:94083525; PMID:8260599 A;Cross-references: DNA A;Residues: 1-233 < CL2> A;Cross-references: EMBL:Z14137; NID:9796; PIDN:CAA78511.1; PID:9798 C;Genetics: 1-233 < CL2> A;Cross-references: EMBL:Z14137; NID:9796; PIDN:CAA78511.1; PID:9798 C;Genetics: 1-233 < CL2> A;Cross-references: EMBL:Z14137; NID:9796; PIDN:CAA78511.1; PID:9798 C;Genetics: 1-233 < CL2> A;Cross-references: EMBL:Z14137; NID:9796; PIDN:CAA78511.1; PID:9798 C;Genetics: 1-233 < CL2> A;Cross-references: EMBL:Z14137; NID:9796; PIDN:CAA78511.1; PID:9798 C;Genetics: 1-233 < CL2> A;Cross-references: EMBL:Z14137; NID:9796; PIDN:CAA78511.1; PID:9798 C;Genetics: 1-233 < CL2> A;Cross-references: EMBL:Z14137; NID:9796; PIDN:CAA78511.1; PID:9798 C;Genetics: 1-233 < CL2> A;Cross-references: EMBL:Z14137; NID:9796; PIDN:CAA78511.1; PID:9798 C;Genetics: 1-233 < CL2> A;Cross-references: EMBL:Z14137; NID:9796; PIDN:CAA78511.1; PID:9798 C;Genetics: 1-233 < CL2> A;Cross-references: EMBL:Z14137; NID:9796; PIDN:CAA78511.1; PID:9798 C;Genetics: 1-233 < CL2> A;Cross-references: EMBL:Z14137; N	Best Local Similarity 21.0%; Pred. No. 0.069; Matches 51; Conservative 48; Mismatches 87; Indels 57; Gaps 11; Qy 60 CLTVVSFYQVAALQGDLASLRAELQG-HHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPP 118
RESULT 6 \$06192 \$06192 tumor necrosis factor alpha precursor - goat (fragment) N;Alternate names: cachectin; TNF alpha C;Species: Capra aegggrus hircus (domestic goat) C;Accession: \$06192; \$41867 R;Goldstein, I.M.; Henner, D.; Talhouk, A. Submitted to the EMBL Data Library, January 1994 A;Residues: 1-193 <gol- a;accession:="" a;cross-references:="" a;cross-references:<="" a;rocession:="" embl:x77317;="" nid:g452607;="" pid:g452608="" pidn:caa54523.1;="" s41867="" td=""><td>Query Match Beet Local Similarity 22.0%; Pred. NO. 0.1; Matches 54; Conservative 46; Mismatches 84; Indels 61; Gaps 14; Qy 60 CUTVVSFYQVAALQGDLASLRAELQG-HHAEKLPAGAGAKAGLEEAPAVTAGLKIFEPP 118 [:: : </td><td>RESULT 5 154490 tumor necrosis factor alpha precursor - white-footed mouse C;Species: Peromyscus leucopus (white-footed mouse) C;Accession: 154490 R;Crew, M.D.; Filipowsky, M.E. Immunogenetics 35, 351-353, 1992 A;Title: Sequence of the tumor necrosis factor/cachectin (TNF) gene from Peromyscus leucce, Reference number: 154490; MUID:92218012; PMID:1348497 A;Accession: 154490 A;Status: preliminary; translated from GB/EMBL/DDBJ A;Residues: 1-235 <res> A;Cross-references: GB:M59233; NID:g202506; PIDN:AAA40596.1; PID:g202507 C;Genetics: A;Gene: pITNF A;Introns: 62/3; 81/1; 97/1 C;Superfamily: tumor necrosis factor C;Keywords: glycoprotein; lipoprotein; myristylation F;19,20/Binding site: myristate (Lys) (covalent) #status predicted F;84/Binding site: carbohydrate (Ser) (covalent) #status predicted</res></td></gol->	Query Match Beet Local Similarity 22.0%; Pred. NO. 0.1; Matches 54; Conservative 46; Mismatches 84; Indels 61; Gaps 14; Qy 60 CUTVVSFYQVAALQGDLASLRAELQG-HHAEKLPAGAGAKAGLEEAPAVTAGLKIFEPP 118 [:: :	RESULT 5 154490 tumor necrosis factor alpha precursor - white-footed mouse C;Species: Peromyscus leucopus (white-footed mouse) C;Accession: 154490 R;Crew, M.D.; Filipowsky, M.E. Immunogenetics 35, 351-353, 1992 A;Title: Sequence of the tumor necrosis factor/cachectin (TNF) gene from Peromyscus leucce, Reference number: 154490; MUID:92218012; PMID:1348497 A;Accession: 154490 A;Status: preliminary; translated from GB/EMBL/DDBJ A;Residues: 1-235 <res> A;Cross-references: GB:M59233; NID:g202506; PIDN:AAA40596.1; PID:g202507 C;Genetics: A;Gene: pITNF A;Introns: 62/3; 81/1; 97/1 C;Superfamily: tumor necrosis factor C;Keywords: glycoprotein; lipoprotein; myristylation F;19,20/Binding site: myristate (Lys) (covalent) #status predicted F;84/Binding site: carbohydrate (Ser) (covalent) #status predicted</res>

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A;Molecule type: mRNA
A;Residues: 1-232 <CHO>
A;Residues: 1-232 <CHO>
A;Cross-references: EMBL:X57321; NID:g2137; PIDN:CAA40591.1; PID:g2138
R;Pauli, U.; Beutler, B.; Peterhans, E.
Gene 81, 185-191, 1989
A;Title: Porcine tumor necrosis factor alpha: Cloning with the polymerase chain A;Reference number: 146659; MUID:90034181; PMID:2478420
A;Accession: 146659
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 44-232 <PAU>
A;Residues: 44-232 <PAU>
A;Residues: 44-232 <PAU>
F;19,20/Binding site: myristate (Lys) (covalent) #status predicted F;81/Binding site: carbohydrate (Ser) (covalent) #status predicted F;144-176/Disulfide bonds: #status predicted
                                                                          C;Superfamily: tumor necrosis factor
C;Keywords: cytokine; cytotoxin; glycoprotein; lipoprotein; lymphokine;
F;1-77/Domain: propeptide #status predicted <PRO>
F;78-232/Product: tumor necrosis factor alpha #status predicted <PAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: EMBL:X54859; NID:g2132; PIDN:CAA38639.1; A;Note: the authors translated the codon GAG for residue 202 R;Choi, C.S.; Molitor, T.W.; Lin, G.F.; Murtaugh, M.P. submitted to the EMBL Data Library, January 1991 A;Description: Complete nucleotide sequence of a cDNA encodir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tumor necrosis factor alpha precursor - pig
c;Species: Sus scrofa domestica (domestic pig)
C;Date: 10-Sep-1999 #sequence revision 10-Sep-1999 #text_chanc
C;Accession: S12606; S17290; S18965; 146659
R;Drews, R.T; Coffee, B.W; Prestwood, A.K.; McGraw, R.A.
Nucleic Acids Res. 18, 5564, 1990
A;Title: Gene sequence of porcine tumor necrosis factor alpha.
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S12606
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                                                                                                                                                                                                                                                      A;Cross-references: GB:M29079; NID:g164694; PIDN:AAA31128.1; PID:g164695
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A; Reference number: S18965
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;Residues: 1-232 <KUH>
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                                                                                                                                                                                                                                    Genetics:
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Pred. No. 0.089;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cDNA encoding porcine tumor necrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     284
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #text_change 04-Feb-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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2 as Gly
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C;Keywords: alternative splicing; cytokine; cytotoxin; glycoprotein; lipoprotein; F;1-77/Domain: propeptide #status predicted <PRO>
F;78-234/Product: tumor necrosis factor alpha #status predicted <TUM>
F;20/Binding site: myristate (Iys) (covalent) #status predicted
F;82/Binding site: carbohydrate (Ser) (covalent) #status predicted
F;96/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;146-178/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-234 <NAS>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: EMBL:X55152; NID:g1405; PIDN:CAA38952.1, A;Experimental source: alveolar macrophage R;Nash, A.D.; Barcham, G.J.; Brandon, M.R.; Andrews, A.E. Immunol. Cell Biol. 69, 273-283, 1991
A;Title: Molecular cloning, expression and characterization A;Reference number: S48118; MUID:92155784; PMID:1786996
                                                                                                                                                                                                                                                                    A;Cross-references: EMBL:X55966; NID:g1403; PIDN:CAA39437.1; PID:g1404
A;Note: comparison with the introns of homologous sequences suggest th
C;Superfamily: tumor necrosis factor
                                                                                                                                                                                                                                                                                                                                                    A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-62,64-234 <YOU>
                                                                                                                                                                                                                                                                                                                                                                                                                                A; Title: Primary structure of ovine tumor necrosis factor alpha cDNA A; Reference number: S13114; MUID:91067496; PMID:2251151 A; Accession: S13114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: EMBL:X56756; NID:g297806; R;Young, A.J.; Hay, J.B.; Chan, J.Y.C. Nucleic Acids Res. 18, 6723, 1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Accession: S48118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: mRNA
A; Residues: 1-234 < GRE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R;Green, I.R.; Sargan, D.R. gene 109, 203-210, 1991
A;Title: Sequence of the cDNA encoding ovine tumor necrosis factor-alpha: problems with A;Reference number: JH0529; MUID:92112044; PMID:1765267
A;Accession: JH0529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tumor necrosis factor alpha precursor - sheep
N,Alternate names: cachectin; TNF alpha
C;Species: Ovis orientalis aries, Ovis ammon aries
C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999
C;Accession: JH0529; S48118; S13114; S20661
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                               Query Match
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Best Local
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  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SPCORETPEGAEAKPWYEPIYLGGVFQLEKDDRL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              --CIQNMPETLPNNSCYS----AGIAKLEEGDELQLAIPRENAQISL-----DGDVTF 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ALEEKENKILVKETGYFFIYGQVLYTDK----TYAMGHLIQRKKVHVFGDELSLVTLFR 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QGLRSSSQTS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLSLFSFLLVAGATTLFCLLHFEVIGPQKEEFPAGP-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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  22.5%;
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Score 102.5;
Pred. No. 0.2
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  0.28;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PIDN:CAA40076.1; PID:g297807
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                         DB 1;
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#text_change 04-
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                         Length
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                                                                                                                                                                                                                                                                                           suggest that this is probably
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Conservative

Mismatches

Indels

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Gaps

12;

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N;Alternate names: lymphotoxin A; TNF beta; tumor necrosis factor beta (TNF beta)
C;Species: Homo sapiens (man)
C;Date: 28-Aug-1985 #sequence_revision 07-Jul-1995 #text_change 16-Jun-2000
C;Accession: A92755; S36154; I54482; A9350; B32877; A91906; A61478; S26951; A01645;
R;Nedwin, G.E.; Jarrett-Nedwin, J.; Smith, D.H.; Naylor, S.L.; Sakaguchi, A.Y.; Goedd
J. Cell. Blochem. 29, 171-181, 1985
A;Title: Structure and chromosomal localization of the human lymphotoxin gene.
A;Reference number: A92755; MUID:86086150; PMID:3001109
A;Accession: A92755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Status: translation not shown; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-124,'P',126-205 <RES>
A;Cross-references: GB:M55913; NID:9339742; PIDN:AAB59455.1; PID:9339743
A;Experimental source: ancestral haplotype 57.1
A;Experimental source: ancestral haplotype 0.1)
A;Note: 59-Asn was also found (ancestral haplotype 0.1)
A
A; Molecule type: mRNA
A; Residues: 1-205 <GRA>
A; Residues: 1-205 <GRA>
A; Cross-references: GB:X01393; NID:g34444; PIDN:CAA25649.1; PID:g34445
A; Cross-references: GB:X01393; NID:g34444; PIDN:CAA25649.1; PID:g34445
A; Experimental source: lymphoblastoid cell line RPMI-1788
A; Experimental source: lymphoblastoid cell line RPMI-1788
Coldeddel, D.V.; Aggarwal, B.B.; Gray, P.W.; Leung, D.W.; Nedwin, G.E.; Palladino, Coldeddel, D.V.; Aggarwal, B.B.; Gray, P.W.; Leung, D.W.; Nedwin, G.E.; Palladino, Coldeddel, D.V.; Aggarwal, B.B.; Gray, P.W.; 1997-609, 1986
A; Title: Tumor necrosis factors: gene structure and biological activities.
A; Reference number: A32877; MUID:87217059; PMID:3472740
A; Reference number: A32877; MUID:87217059; PMID:3472740
A; Rocession: B32877
A; Status: preliminary; not compared with conceptual translation
A; Molecule type: mRNA
A; Residues: 35-205 <GOE>
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A; Residues: 1-12, 'R', 14-205 < IRI>
A; Residues: 1-12, 'R', 14-205 < IRI>
A; Cross-references: EMBL: Z15026; NID: g37211; PIDN: CAA78746.1; PID: g37213.
A; Note: the nucleotide sequence was submitted to the EMBL Data Library, A; Note: the nucleotide sequence was submitted to the EMBL Data Library, A; Abraham, L.J.; Du, D.C.; Zahedi, K.; Dawkins, R.L.; Whitehead, A.S.
Immunogenetics 33, 50-53, 1991
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A;Residues: 1-59,'N',61-205 <NED>
R;Iris, F.J.M.; Bougueleret, L.; Prieur, S.; Caterina, D.; Primas,
Nature Genet. 3, 137-145, 1993
Nature Genet. 3, 137-145, 1993
A;Title: Dense Alu clustering and a potential new member of the NFk
A;Reference number: S36152; MUID:93272029; PMID:8499947
A;Accession: S36154
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R;Kobayashi, Y.; Miyamoto, D.; Asada, M.; Obinata, M.; Osawa, T.
J. Biochem. 100, 727-733, 1986
A;Title: Cloning and expression of human lymphotoxin mRNA derived from a human lapteference number: A91906; MUID:87057135; PMID:3536896
A;Accession: A91906
A;Accession: A91906
A;Molecule type: mRNA
A;Residues: 1-59, NY,61-205 < KOB>
A;Role: Sidues: 1-59, NY,61-205 < KOB>
A;Richer Sidues: 1-59, NY,61-205 < KOB>
A;Residues: 1-59, NY,61-205 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: GDB:10442; OMIM:153440
A;Map position: 6p21.3-6p21.3
A;Introns: 33/3; 69/1
A;Note: the first intron occurs before the initiator codon
A;Superfamily: tumor necrosis factor
C;Superfamily: tumor necrosis factor
C;Keywords: cytokine; cytotoxin; glycoprotein; homotrimer; lymphokine; macrophage
F;1-34/Domain: signal sequence #status predicted <SIG>
F;1-34/Domain: signal sequence #status predicted <SIG>
F;35-205/Product: lymphotoxin #status predicted <ANI>
F;41/Binding site: carbohydrate (Thr) (covalent) (partial) #status experimental
F;96/Binding site: carbohydrate (Asn) (covalent) #status experimental
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A;Molecule type: protein
A;Residues: 35-59,'N',61-205 <VOI>
A;Residues: 35-59,'N',61-205 <VOI
A;Residues: 35-59,'N',61-205 <VOI
A;Note: 60-Thr was also found
R;Fukushima, K.; Watanabe, H.; Takeo, K.; Nomura, M.; Asahi, T.; Yamashita, K.
Arch. Biochem. Biophys. 304, 144-153, 1993
A;Title: N-linked sugar chain structure of recombinant human lymphotoxin produced by A;Reference number: S34742; MUID:93311995; PMID:8323280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Comment: Secreted from mitogen-activated lymphocytes within 1-2 days after induction, t while having no detrimental effect on normal cells. It can also act synergistically with C;Comment: This protein and TNF-alpha (tumor necrosis factor) are the products of differential activities but are produced by different cell types and have different induction kires.
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A;Title: Natural human tumor necrosis factor beta (lymphotoxin). Variable O-glycosylation A;Reference number: S26951; MUID:93083656; PMID:1451807
A;Accession: S26951
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A; Molecule type: protein
A; Residues: 56-79;86-95; 'X',97,'X',99;119-151,'XX',154-162,'X',164,'X',166,'X',168,'X'
R; Voigt, C.G.; Maurer-Fogy, I.; Adolf, G.R.
FEBS Lett. 314, 85-88, 1992
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A;Contents: annotation
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                                                                                KLEEGDELQL---AIPRENAQISLDGDVTFFGALKL
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QLTQGDQLSTHTDGIP----HLVLSPSTVFFGAFAL
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Pred. No. 0.35;
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tumor necrosis factor alpha precursor N;Alternate names: cachectin; TNFA C;Species: Homo sapiens (man) C;Date: 28-Aug-1985 #sequence_revisior

[validated]

#sequence_revision

28-Aug-1985

#text_change

08-Dec-2000

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A;Residues: 1-8 <DAL>
A;Cross-references: GB.S68530; NID:g544751
A;Cross-references: GB.S68530; NID:g544751
R;Stevenson, F.T.; Bursten, S.L.; Locksley,
J. Exp. Med. 176, 1053-1062, 1992
A;Title: Myristyl acylation of the tumor nec
A;Reference number: A59163; MUID:93018820; F
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A; Residues: 1-62,'S',64-233 < WAN>
A; Residues: 1-62,'S',64-233 < WAN>
A; Cross-references: GB:M10988; NID:9339737; PIDN:AAA61198.1; PID:9339738
A; Fukuda, S.; Ando; S.; Sanou, O.; Taniai, M.; Fujii, M.; Masaki, N.; Nai
Dymphokine Res. 7, 175-185, 1998
A; Title: Simultaneous production of natural human tumor necrosis factor-a
A; Reference number: A61478; MUID:88301617; PMID:2841543
A; Accession: B61478
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Bux. J. Biochem. 152, 515-522, 1985
A;Title: Molecular cloning and expression of human tumor
A;Reference number: 153311, MUID:86030296; PMID:3932069
A;Accession: 153311
                                                                                                                                                                                                                                                      A;Accession: I54522
A;Status: prelimina
                                                                                                                                                                                                                                                                                                                                                    R;D'Alfonso, S.; Richiardi, P.M.
Immunogenetics 39, 150-154, 1994
A;Title: A polymorphic variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Title: O-Glycosylated species of natural human tumor-necrosis A;Reference number: S62610; MUID:96202967; PMID:8631363 A;Accession: S62610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: GB:M26331; NID:g339763; PIDN:AAA36758.1; PID:g339764
A;Experimental source: U-937 Cells
R;Takakura-Yamamoto, R.; Yamamoto, S.; Fukuda, S.; Kurimoto, M.
Eur: J. Blochem. 235, 431-437, 1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: protein A; Residues: 77-99 < TAK>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-233 < MAR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: GB:X02910; GB:X02159; NID:g37209; PIDN:CAA26669.1; PID:g37210 A;Note: this protein was isolated from the monocyte-like cell line HL-60 from a pr R;Wang, A.M.; Creasey, A.A.; Ladner, M.B.; Lin, L.S.; Strickler, J.; Van Arsdell, Science 228, 149-154, 1985
A;Title: Molecular cloning of the complementary DNA for human tumor necrosis factors, R;Reference number: A44189; MUID:85142190; PMID:3856324
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A;Title: Human tumour necrosis factor: precursor structure, A;Reference number: A93351, MUID:85086244; PMID:6392892
A;Accession: A93351
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A;Title: Human lymphotoxin and tumor necrosis factor genes: structure, homology and chap;Reference number: A93585, MUID:86016093; PMID:2995927
A;Accession: A93585
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nature Genet. 3,
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;Residues: 83-102;109-119;121-128,'X',130-131;142-144,'X',146,'XXX',150-152;159-174;180
;Residues: 83-102;109-119;121-128,'X',130-131;142-144,'X',146,'XXX',150-152;159-174;180
                                                                                                                                                                                                                                                                                                                       Reference number: 154522;
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                                                                                                                                                                                                                                                  Status: preliminary; translated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Status: translated from GB/EMBL/DDBJ
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;Residues: 1-233 <IRI>
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          cylation of the tumor necrosis A59163; MUID:93018820; PMID:14
                                                                                                                                                                                                                                                                                                                    ation in a putative regulation MUID:94102809; PMID:7903959
                                                                                                                                                                                                                                                      from GB/EMBL/DDBJ
          ecrosis factor alpha
PMID:1402651
                                                                                                            R.M.; Lovett,
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Perrot, V.;
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                                       on specific
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A;Gene: GDB:TNF; TNFA
A;Cross-references: GDB:120441;
A;Map position: 6p21.3-6p21.3
A;Introns: 62/3; 78/1; 94/1
C;Complex: homotrimer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Title: Human tumor necrosis factor. Production, purification, and characterizat A;Reference number: A92511; MUID:85130974; PMID:3871770
A;Contents: annotation; disulfide bond
C;Comment: Secreted from mitogen-activated macrophages within 4-24 hours after in out detriment to normal cells. It can also act synergistically with interferon ga C;Comment: TNF-alpha and -beta (lymphotoxin) are the products of different genes ut are produced by different cell types and have different induction kinetics.
C;Genetics:
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232 AL
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                                                                                                                                       LFR--CIONMPETLPNNSCYS----AGIAKLEEGDELQLAIPRENAQISLDGDVTFFGAL
                                                                                                                                                                                        LANGVELRONQLVVPSEGLYLTYSQVLFKGQGCPSTHVLLTHTISRIAVS-YQTKVNLLS
                                                                                                                                                                                                                                                                                                                                   VQGPEETVTQDCLQLI-----ADSETPTIQKGSYTF-----VPWLLSFKRGSAL
                                                                                                                                                                                                                                                                                  VIGPOREEFPRDLSLISPLAQAVRSSSRTPSDKPVAHVVANPQAEGQLQWL--NRRANAL
                                              284
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Pred. No. 0.61;
4; Mismatches 69;
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N;Alternate names: cachectin; TNF alpha
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 10-Sep-1999 #sequence revision 10-Sep-1999
C;Accession: A25454, A25451, TS0727 tumor necrosis factor alpha precursor - rabbit N;Alternate names: cachectin; TNF alpha Ito, H.; Yamamoto,

S.; Kuroda,

s.;

Sakamoto,

H.; Kajihara,

J.;

Kiyota,

T.; Hayashi, H.

#text_change

04-Feb-2000

A;Cross-references: GB:M12845; NID:g165759; R;Ito, H.; Shirai, T.; Yamamoto, S.; Akira, DNA 5, 149-156, 1986
A;Title: Molecular cloning a
A;Reference number: A25454; A; Molecule type: mRNA A; Residues: 1-234 <ITO> A;Accession: A25454 and expression :
; MUID:86219711; in Escherichia PMID:3519137 PIDN:AAA31486.1; M.; Kawahara, S.; coli PID:g165760 ; Todd, C.W.; 0£ the cDNA coding for Wallace,

A; Title: Molecular cloning of the gene encoding rabbit A; Reference number: A25451; MUID:86219712; PMID:3519138 A; Accession: A25451

157-165, 1986

necrosis

R. B

A;Note: this sequence differs from that shown in having a Gln in: R;Shakhov, A.N.; Kuprash, D.V.; Azizov, M.M.; Jongeneel, C.V.; N: Gene 95, 215-221, 1990
A;Title: Structural analysis of the rabbit TNF locus, containing A;Reference number: JH0309; MJID:91065534; PMID:2249779 A; Molecule type: DNA A; Residues: 1-234 <IT2> inserted between Nedospasov, S.A. residues

encoding TNF-1

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A;Introns: 62/3; 80/1; 96/1
C;Superfamily: tumor necrosis factor
C;Superfamily: tumor necrosis factor
C;Keywords: cytokine; cytotoxin; glycoprotein; lipoprotein; lymphokine;
F;1-81/Domain: propeptide #status predicted <PRO>
F;182-234/Product: tumor necrosis factor #status predicted <MAT>
F;19,20/Binding site: myristate (Lys) (covalent) #status predicted
F;83/Binding site: carbohydrate (Ser) (covalent) #status predicted
F;147-178/Disulfide bonds: #status predicted
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A;Molecule type: DNA
A;Residues: 1-62, Q',63-234 <SHA>
A;Cross-references: GB:M60340; GB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Accession: A82993
R;Stover, C.K.; Pham, X.Q.; Erwin, A.L.; Mizoguchi, S.D.; adman, S.; Yuan, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.; Lory, S.; Olson, M.V.
Nature 406, 959-964, 2000
I38707
Fas ligand
C;Species:
                                                                                                                                                                                                                                                                                                                                                     A;Nolecule type: DNA
A;Molecule type: DNA
A;Residues: 1-184 <STO>
A;Cross-references: GB:AE004935; GB:AE004091; NID:g9951526; PIDN:AAG08610.1; GSPDB:GN001
A:Fxnerimental source: strain PAO1
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C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000
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A;Reference number: A82950;
A;Accession: A82993
A;Status: preliminary
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  l - human
Homo sap
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                                                                                                                                                                                                                            81 AELOGHHAEKLPAGAGAFKAGLEEAPAVTAGLKIFEPPAPGEGNSSONSRNKRAVOGPEE 140
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Similarity 21.2%;
                                                                                                                                                                                                                                                                                    Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ILVKETGYFFIYGQVLYTD---KTYA-MGHLIQRKKVHVFGDELSLVTLFR--CIQNMPE 238
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                                                                                                                   MVRQDFSAGEVAVVMLLPDDETPLAQR-TEALGQWCQGFLAGFGLTAREGSL
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  sapiens (man)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence of Pseudomonas aeruginosa PA01,
50; MUID:20437337; PMID:10984043
                                                                                                                                                     --CLQLIADSETPTIOKGSYTFVPWLLSFKRGSALEEKENKI
                                                                                                                                                                                                                                                                                    6.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GB:M35326;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                46;
                                                                                                                                                                                                                                                                      11;
                                                                                                                                                                                                                                                                    Score 97.5; DB Pred. No. 0.55; 11; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 98; D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          - Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NID:g165754;
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0.67;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----VPWLLSFKRGSAL----EEKENK 184
                                                                                                                                                                                                                                                                                                          DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                72;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 234
                                                                                                                                                                                                                                                                                                            Length 184;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PIDN: AAA31484.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----VQGPEETVTQDCL
                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             K.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Warrener, P.; Hickey,
K.R.; Kas, A.; Larbig,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           shown
                                                                                                                                                                                               RIKAALSGLLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64;
                                                                                                                                                                                                                                                                        21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (strain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      an opportunistic
                                                                                                                       122
                                                                                                                                                           185
                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         macrophage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PID:g165756
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                                                                                                                                                                                                                                                                          4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 M.J.; Br
K.; Lim,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         path
        hypothetical protein - Deinococcus radiodurans (strain C;Species: Deinococcus radiodurans C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #tex
                                                                RESULT
A75537
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#text_change

17-Mar-2000

R1)

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C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 21-Jul-2000 C;Accession: I38707; JC2340; S57565; I38554 R;Takahashi, T.; Tanaka, M.; Inazawa, J.; Abe, T.; Suda, T.; Nagata, S. Int. Immunol. 6, 1567-1574, 1994 A;Title: Human Fas ligand: gene structure, chromosomal location and species A;Reference number: I38707; MUID:95127560; PMID:7826947 A;Accession: I38707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Molecule type: mRNA
A;Residues: 1-281 <RES>
A;Residues: 1-281 <RES>
A;Cross-references: EMBL:U11821; NID:g595430; PIDN:AAC50124.1; PID:g595431
R;Mita, E.; Hayashi, N.; Iio, S.; Takehara, T.; Hijioka, T.; Kasahara, A.; Fusan Biochem. Biophys. Res. Commun. 204, 468-474, 1994
A;Title: Role of Fas ligand in apoptosis induced by hepatitis C virus infection. A;Reference number: JC2340; MUID:95071350; PMID:7980502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: EMBL:X89102; NID:g887455; PID:g887456
R;Alderson, M.R.; Tough, T.W.; Davis-Smith, T.; Braddy, S.;
J. Exp. Med. 181, 71-77, 1995
A;Title: Fas ligand mediates activation-induced cell death in A;Reference number: 138554; MUID:95105731; PMID:7528780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A:Status: preliminary; translated from GB/EMBL/DDBJ
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A; Residues: 1-281 <SC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Reference number: A; Accession: S57565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    submitted to the EMBL Data Library,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R;Schatzlein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: GB:D38122; DDBJ:D29820; NID:g601892;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-281 < MIT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Accession: JC2340
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C;Keywords: glycoprotein; transmembrane protein
F;80-102/Domain: transmembrane #status predicted <TMM>
F;76,184,250,260/Binding site: carbohydrate (Asn) (Cov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Status: preliminary; translated from GB/EMBL/DDBJ
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A; Residues: 1-281 <RE2>
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Best Local S
Matches 56
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                                   254
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                                                                                                                                                                         147
                                                                                                                                                                                                                147 LQLIADSET---PTIQKGSYTFVPWLLSFKRGSALEEKENKILVKETGYFFIYGQVLY--
                                                                                                                                                                                                                                                                  123
                                                                                                                                                                                                                                                                                                        87 HAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAPGEGNSSQNSRNKRAVQGPEETVTQDC 146
                                                                                                                                                                                                                                                                                                                                                        63
                                                                                                                                                                                                                                                                                                                                                                                                   31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6.7%;
Similarity 20.7%;
                                                                                                                                                                                                                                                                                                                                                      LPPLPPLKKRGNHSTGLCLLVMFFMVLVALVGLGLGMFQLFHLQKELAELRESTSQMH
                                                                                                                                                                                                                                                                                                                                                                                                   LPRKESPSVR---SSKDGKLLAATLLLALLSCCLTVVSFYQVAALQGDLASLR-AELQGH
                                                                                                                                                                       AHLTGKSNSRSMPLEWEDTYGIV--LL----SGVKYKKGGLVINETGLYFVYSKVYFRG
                                   EEGDELQLAIPRENAQISLDGDVTFFGALKL 284
                                                                                 QSCNNLPLSHKVYMRNSKYPQDLVMMEGKMMSYCTTGQ----
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                            -TDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETLPNNSCYSAGIAKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                   39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 97.5; DB Pred. No. 0.93;
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281
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     107;
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                                                                                          -MWARSSYLGAVENL
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69
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A,Residues: 1-651 <WED>
A,Cross-references: EMBL:Z72868; NID:g1323118;
A,Experimental source: strain S288C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Molecule type: DNA
A;Residues: 1-651 <PAD>
A;Residues: 1-651 <PAD>
A;Cross references: EMBL:X15658; NID:g3733; PIDN:CAA33693.1; PID:g3734
A;Cross references: EMBL:X15658; NID:g3733; PIDN:CAA33693.1; PID:g3734
A;Wedler, H., Scharfe, M.; Wedler, E.; Wambutt, R.
submitted to the Protein Sequence Database, May 1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Paddon, C.J.; Hannig, E.M.; Hinnebusch, A.G. Genetics 122, 551-559, 1989
A;Title: Amino acid sequence similarity between GCN3 and GCD2, A;Reference number: S05809; MUID:89339141; PMID:2668117
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A;Molecule type: DNA
A;Residues: 1-347 < WHI>
A;Cross-references: GB:AE001890;
A;Cross-references: Strain R1
                                                                                                                                                                                                                                                                        A; Map position:
                                                                                                                                                                                                                                                                                          A;Gene: SGD:GCD2; GCD12; MIPS:YGR083c
A;Cross-references: SGD:S0003315; MIPS:YGR083c
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R;White, O.; Eisen, J.A.; Heidelberg, J.F.; Hickey, E.K.; Peterson, , M.; Shen, M.; Vamathevan, J.J.; Lam, P.; McDonald, L.; Utterback, S.; Smith, H.O.; Venter, J.C.; Fraser, C.M.
Science 286, 1571-1577, 1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Accession: S05809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              translation regulator GCD2 - yeast (Saccharomyces cerevisiae)
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                                                                                                                                                Superfamily: translation regulator GCD2
;Reywords: P-loop; phosphoprocein
;573-580/Region: nucleotide-binding motif A (P-loop) #status atypical
;106/Binding site: phosphate (Ser) (covalent) (by CAMP-dependent kinase)
;121/Binding site: phosphate (Thr) (covalent) (by cAMP-dependent kinase)
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Best Local S
Matches 37
                                                                                           Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              106 PAVTAGLKIFEPPAP 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   159 GGTLTFQPEAVAAGTDPSVAALLAPVQAELARTHAELLAGLDPASFGLLRGGPAAGSPKP 218
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                                                                        67;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9 QSRLTSCLKKRE---EMKLKECVSILPRKESP----SVRSSKDGKLLAATLLLALLSCC
DDSTEREQSRLTSCLKKREEMKLKECVSI--LPRKE---: : | | : | : | : | | | |
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                                                                   6.4%; Score 93.5; larity 19.1%; Pred. No. 5. Conservative 55; Mismatche
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Pred. No. 2.2;
23; Mismatches
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                                                                   ed. No. 5.7;
Mismatches 140;
                                                                                                           DB 1;
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                                                                                                           Length 651;
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                                                                   Indels
                       ----SPSVRSSKDGKLLAA 50
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                                                                 , 68
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T.; Zalewski, C.; Ma
                                                                                                                                                        #status
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                                                                                                                                                                                170 -----LSFKRGSALEE-KE---NK------ILVKETGYFFIYG--
                                                                                                                                                                                                                      183
                                                                                                                                                                                                                                                     111 GLKIFEPPAPGEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWL- 169
                                                                                                                                                                                                                                                                                        141 GLMVPVVA------SALSGSNVLTASSL-----MPVGPNASSTVSASAPASTT 182
                                                                                                                                                                                                                                                                                                                           51 TLLLALLSCCLTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTA 110
                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                               TTLPASSAÁLSAGTSSASTNTPTÁIQ--QEIASSNASDVAKTLASISLEAGEFNVIPGIS
KAAKKDLCEKIGQFAKEKIELAD--QLIIDNASTQIEESTTIVTYGSSKVL
                                  NS-----CYSAG----IAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                                                      QVLYTDKTYAMGHLIQRKKVHVFGDELSL-----VTLFRCIQNMPETL-----
                                                                                                                                           SVIPTVLEQSFDNSSLISSVKELLLNKDLIHPSILLLTSHLAHYKIVGSIPRCIAMLEVF
                                                                       QIVIKDYQTPKGTTLSRNLTSYLSHQIDLLKKARPLSVTMGNAIRMLKQEISLIDPSTPD 360
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Search completed: August 25, 2004, 14:44:16 Job time : 36.4697 secs

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Title:
Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 200000000
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   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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1451
1 MDDSTEREQSRLTSC
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Match
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Gapop 10.0 , Gapext 0.5
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     GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd
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                                                                                                                                                                                                                                                                                                               O9y275 homo sapien
O9w272 mus musculu
O9d477 mus musculu
O75888 homo sapien
P51742 canis famil
O9bea1 tursiops tr
P19101 felis silve
O8w271 delphinapte
P16599 rattus norv
P66804 mus musculu
O6599 bos taurus
P3639 peromyscus
P33633 sus scrofa
P13296 capra hircu
                                                                                                                                                                                                                  P59694
Q8hzd9
P59684
P59693
Q9beg5
P23383
     P01374
P51435
P01375
Q9htw5
P48023
P50591
Q8mkg8
Q9my16
P79374
P04924
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                                                    9 ratius musculy
4 mus musculy
9 bos taurus
9 peromyscus
3 sus scrofa
6 capra hircu
4 lama glama
9 pan troglod
4 bos indicus
5 bos taurus
5 bos taurus
5 ovis aries
6 carvus elap
4 homo sapien
5 carvia porce
5 homo sapien
6 sapien
9 pseudomonas
10 homo sapien
11 homo sapien
15 pseudomonas
15 pseudomonas
16 saimiri sci
                      macaca mula
trichosurus
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45	44	43	42	41	40	39	38	37	36	35	ယ 4
87.5	87.5	87.5	6 8	89.5	89.5	89.5	90.5	92.5	92.5	93.5	93.5
6.0	6.0	6.0	6.1	6.2	6.2	6.2	6.2	6.4	6.4	6.4	6.4
993	233	233	1267	773	234	233	204	280	253	651	282
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TSH_DROME	TNFA_PAPHU	TNFA_PAPAN	HMT1_HUMAN	UB34_HUMAN	TNFA_HORSE	TNFA_PAPSP	TNFB_PIG	TNF6_CERTO	TNFA_SPAAU	E2BD_YEAST	TNF6_PIG
P22265	0775	5965d	26460	17460	T N S O S O S	P33620	T2644	TDG 60	54 [80	P12754	Q9bea8
55 drosophila	lo papio hamad	papio anuni	ol nomo sapien	15 homo sapien	3 equus cabar	papio sp. (b sus scrora	11 cercocebus			

ALIGNMENTS

RRERRE	RR	RA RA RT	RA R	RN RT RA	ACCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCO	RESULT
SEQUENCE FROM N.A. TISSUE-Dendritic cell; Zhang W., Wan T., Yu Y., Cao X.; "A novel dendritic cell-derived TNF-like molecule."; submitted (MAR-1999) to the EMBL/GenBank/DDBJ databases. [6]	N.A. Ess J., Ehomolog	SEQUENCE FROM N.A. TISSUE=Monocytes, and Neutrophils; TISSUE=99329343; pubMed=10398604; MEDLINE=99329343; pubMed=10398604; Moore P.A., Belvedere O., Orr A., Pieri K., LaFleur D.W., Feng P., Soppet D., Charters M., Gentz R., Parmelee D., Li Y., Galperina O., Giri J., Roschke V., Nardelli B., Carrell J., Sonovtseva S., Greenfield W., Ruben S.M., Olsen H.S., Fikes J., Hilbert D.M.; "BLyS: member of the tumor necrosis factor family and B lymphocyte stimulator."; Science 385:260-263(1999).	SEQUENCE FROM N.A., AND SEQUENCE OF 134-148. MEDLINE=99288033; PubMed=10359578; Schneider P., MacKay F., Steiner V., Hofmann K., Bodmer JL., Holler N., Ambrose C., Lawton P., Bixler S., Acha-Orbea H., Valmori D., Romero P., Werner-Favre C., Zubler R.H., Browning J.L., Tschopp J.; "BAFF, a novel ligand of the tumor necrosis factor family, stimulates B cell growth."; J. Exp. Med. 189:1747-1756(1999).	SEQUENCE FROM N.A. MEDLINE=99260341; PubMed=10331498; MEDLINE=99260341; PubMed=10331498; Shu HB., Hu WH., Johnson H.; "PALL-1 is a novel member of the TNF family that is down-regulated by mitogens."; I Leukoc. Biol. 65:680-683(1999). [2]	T13B HUMAN STANDARD; PRT; 285 AA. Q9Y275; Q9Y275; 16-OCT-2001 (Rel. 40, Created) 16-OCT-2001 (Rel. 40, Last sequence update) 16-OCT-2003 (Rel. 42, Last annotation update) 10-OCT-2003 (Rel. 42, Last annotation update) Tumor necrosis factor ligand superfamily member 13B (TNF-and APOL-related leukocyte expressed ligand 1) (TALL-1) (B lymphocyte related leukocyte expressed ligand 1) (TALL-1) (B lymphocyte stimulator) (BLyS) (B cell-activating factor) (BAFF) (Dendritic cell-related TNF-like molecule). TNFSF13B OR TALL1 OR BLYS OR BAFF OR ZTNF4. Homo sapiens (Human). Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. NCBI_TaxID=9606;	LT 1

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WREDLINE-19112420; PubMed=11862220;
A Oren D.A., Li Y., Volovik Y., Morris T.S., Dharia C., Das K.,
A Galperina O., Gentz R., Arnold E.;
A Galperina O., Gentz R., Arnold E.;
XI "Structural basis of BLyS receptor recognition.";
XI Mat. Struct. Biol. 9:288-292(2002).
C. IFUNCTION: Cytokine that binds to INFRSF13B/TACI and INFRSF17/BCMA.
CC PINSF13/APRIL binds to the same 2 receptors. Together, they form a CC ligands -2 receptors pathway involved in the stimulation of B-CC and T-cell function and the regulation of humoral immunity. A chird B-cell specific BAFF-receptor (BAFFR/BR3) promotes the SURVIVAL OF mature B-cells and the B-cell response.
C. ISUBUNIT: Homotrimer.
C. ISUBUNIT: Homotrimer.
C. ISUBUNIT: ABUNDANTLY EXPRESSED IN PERIPHERAL BLOOD EXTRACE AND IS SPECIFICALLY EXPRESSED IN MONOCYTES AND CLEUKS AND IS SPECIFICALLY EXPRESSED IN MONOCYTES AND CELLS ALSO FOUND IN THE SPLEEN, LYMPH NODE, BONE MARROW, T-CELLS AND TIME TITURE SPECIFIC NOT PROMOTED IN PLACENTA, THE SPLEEN TO THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RX MEDLINE=22388257; PubMed=12477932;

RX Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RA Klausner R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Barownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Raha S.S., Loquellano N.A., Peters G.G., Maramen R.D., Mullahy S.J.,

RA Raha S.S., Mozrley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Willalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Miting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;

"Generation and initiaal analysis of more than 15,000 full-length

RE Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            X-RAY CRYSTALLOGRAPHY (2.8 ANGSTROMS) OF 136-285.
MEDLINE=21686304; PubMed=11827482;
Karpusas M., Cachero T.G., Qian F., Boriack-Sjodi
Strauch K., Hsu Y.-M., Kalled S.L.;
"Crystal structure of extracellular human BAFF, a
that stimulates B lymphocytes.";
J. Mol. Biol. 315:1145-1154(2002).
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MEDLINE=21842897; PubMed=11853672;
Liu Y., Xu L., Opalka N., Kappler J.,
"Crystal structure of STALL-1 reveals
family ligands.";
Call 108:383-394(2002).
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YU G., Boone T., Delamey J., Hawkins N., Kelley M.J., R.
McCabe S., Qiu W.R., Kornuc M., Xia X.-Z., Guo J., Stol.
Boyle W.J., Sarosi I., Hsu H., Senaldi G., Theill L.E.;
"APRIL and TALL-I and receptors BCMA and TACI: system for
humoral immunity.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 1-135 FROM N.A., AND VARIANT THR-105.

KAWABSAKI A., TSUCHIYA N., FUKAZAWA T., HASHIMOTO H., Tok
"New polymorphisms of human BLyS gene.";
Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                K-RAY CRYSTALLOGRAPHY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.
TISSUE=Placenta;
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MIM; 603969; ...
GO; GO:0005625; C:soluble fraction; TAS.
GO; GO:0005625; F:receptor binding; TAS.
GO; GO:0005103; F:recl proliferation; TAS.
GO; GO:0008283; P:cell proliferation of cell
GO; GO:0008265; P:signal transduction; TAS.
InterPro; IPR006052; TNF family.
InterPro; IPR008083; TNF family.
SMART; SM00207; TNF 1.
PROSITE; PS00251; TNF 1; FALSE NEG.
PROSITE; PS00249; TNF-2; 1.
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EMBL; AR116456; AAD25356.1; --
EMBL; AR132609; AAD21092.1; --
EMBL; AR132609; AAD21092.1; --
EMBL; AR73267; AAF60219.1; --
EMBL; AR732715; AAF60219.1; --
EMBL; AB073225; BAB90856.1; --
EMBL; BC020674; AAH20674.1; --
EMBL; BC020674; AAH20674.1; --
EMBL; EC020674; AAH20674.1; --
EMBL; EC020674; AAH20674.1; --
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MIM; 6
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                                                                                                                                                                                                                                                                                                                                                                  VARIANT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  proteolytic processing.
-i- PTM: N-glycosylated.
-i- SIMILARITY: Belongs to the tumor necrosis factor family.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INDUCTION: UPREGULATED BY EXPOSURE TO INTERFERON-GAMMA, DO REGULATED BY PHORBOL MYRISTATE ACETATE/IONOMYCIN TREATMENT PTM: The soluble form derives from the membrane form by
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N-LINKED (GLCNAC.
A -> T.
/FTId=VAR_013483.
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DT 16-OCT-2001 (Rel. 40, Last sequence update)

DT 16-OCT-2001 (Rel. 41, Last annotation update)

DT 16-OCT-2001 (Rel. 41, Last annotation update)

DT 16-OCT-2003 (Rel. 41, Last annotation update)

DT 28-FEB-2003 (Rel. 41, Last annotation update)

DT 18-FEB-2003 (Rel. 41, Last annotation update)

DT 28-FEB-2003 (Rel. 40, Last annotation update)

DT 28-FEB-2003 (Rel. 41, Last annotation update)

DT 28-FEB-2003 (Rel. 41, Last annotation update)

RX MCBILINES-9288033; PubMed=10359578;

RX MADDINES-9288033; PubMed=10359578;

RX MADDINES-9288033; PubMed=10359578;

RX Valmori D., Romero P., Werner-Favre C., Zubler

RX Walmori D., Romero P., 
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Matches 285
                                                                              Polymorphism and chromosomal mapping of the mouse gene for B-cell activating factor belonging to the tumor necrosis factor family [Baff] and association with the autoimmune phenotype."; [Immunogenetics 53:810-813(2001).

In Immunogenetics 53:810-813(2001).

C -i- FUNCTION: Cytokine that binds to TNPRSF13/FACI and TNFRSF17/BCMA.

C -i- FUNCTION: Cytokine that binds to TNPRSF13/FACI and TNFRSF17/BCMA.

C -i- FUNCTION: The soluble form as 2 receptors. Together, they form a c 2 ligands -2 receptors pathway involved in the stimulation of B-cell function and the regulation of humoral immunity. A compared the soluble form and the B-cell response.

C -i- SUBCULIAR LOCATION: Type II membrane protein. Also exists as an extracellular soluble form.

C -i- FYM: The soluble form derives from the membrane form by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIINE=99288033; PubMed=10359578;
Schneider P., MacKay F., Steiner V., Hofmann
Holler N., Ambrose C., Lawton P., Bixler S.,
Valmori D., Romero P., Werner-Favre C., Zuble
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                                    necrosis
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, Zubler R.H., Bro
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MGD; MGI:1344376; TAF£13b
InterPro; IPR006052; TNF_family.
InterPro; IPR008983; TNF_like.
SMART; SM00207; TNF; 1; FALSE NEC
PROSITE; PS00251; TNF 1; FALSE NEC
PROSITE; PS50049; TNF_2; 1...
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                MGHLIQRKKVHVFGDELSLVTLFRCIQNMPETLPNNSCYSAGIAKLEEGDELQLAIPREN
                                                                                                                                                                                                                                                          QLIADSETPTIQKGSYTFVPWLLSFKRGSALEEKENKILVKETGYFFIYGQVLYTDKTYA
                                                                                                                                                                                                                                                                                          SSFTAMSLYQLAALQADLMNLRMELQSYRGSATPAAAGAPE
                                                                                                                                                                                                                                                                                                                                                                                                           MDDSTER-EQSRLTSCLKKREEMKLKECVSILPRKESPS-VRSSKDGKLLAATLLLALLS
                                                                                                                                                                                                                                           QLIADSDTPTIRKGTYTFVPWLLSFKRGNALEEKENKIVVRQTGYFFIYSQVLYTDPIFA
                                                                                                                                                                                                                                                                                                                                                              CCLTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPP
                                                                                                                                                                                                                                                                                                                                                                                     MDESAKTLPPPCLCFCSEKGEDMKV-GYDPITPQKEEGAWFGICRDGRULAATLLLALLS
                                                                                                                                                                                                                                                                                                               APGEGNSSQNSRNKRAVQGPEET--------
                                                                                                                                                   AQISRNGDDTFFGALKLL
                                                                                                                                                                        AQISLDGDVTFFGALKLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Transmembrane;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        69
126
256
117
266
                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ΑĀ;
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127
269
117
266
79
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                                                                                                                                                                                                                                                                                                                                                                                                                                               62.7%;
60.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  34192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glycoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FALSE_NEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                    33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EXTRACELLULAR (POTENTIAL).
CLEAVAGE (BY SIMILARITY).
BY SIMILARITY.
N-LINKED (GLCNAC. ..) (POTE
N-LINKED (GLCNAC. ..) (POTE
N-LINKED (GLCNAC. ..) (POTE
N-S (IN STRAIN NZB).
N-S (IN STRAIN NZB).
                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 910; DB
Pred. No. 7.3e
33; Mismatches
                                                                                                                                                                           285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEMBER 13B, MEMBRANE FORM.
TUMOR NECROSIS FACTOR LIGAND SUF
MEMBER 13B, SOLUBLE FORM.
CYTOPLASMIC (FOTENTIAL).
SIGNAL-ANCHOR (TYPE-II MEMBRANE
SIGNAL-ANCHOR (TYPE-II MEMBRANE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TUMOR NECROSIS FACTOR LIGAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Signal-anchor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1;
7.3e-70;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                         -----LTAGVKLLTPA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (POTENTIAL)
                                                                                                                                                                                                                                                                                                                   -----VIQDCL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUPERFAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUPERFAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                     42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      collaboration -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROTEIN)
                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                    147
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TN13 MOUSE STANDARD; PRT; 241 AA. 09D777; Q9ERP1; 28-FEB-2003 (Rel. 41, Created) 28-FEB-2003 (Rel. 41, Last sequence update) 28-FEB-2003 (Rel. 41, Last annotation update) Tumor necrosis factor ligand superfamily membinducing ligand) (APRIL).

member

13

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proliferation-

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RC STRAIN-C37BL/G; TISSUE=Tongue;

RM MEDLINE-C37BL/G; TISSUE=Tongue;

RM MEDLINE-C3108566); pubMed-1121781;

RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,

RA Azakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,

RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,

RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,

RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kasukawa T., Saito R.,

RA Alzawa K., Okazaki Y., Gojobori T., Bond H., Kasukawa T., Saito R.,

RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,

RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,

RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Baldarelli R., Barsh G.,

RA Shrimi L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,

RA Shrimi L.M., Staubli F., Suzuki R., Tomita M., Wagner L.,

RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,

RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,

RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,

RA Hyoshti H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,

RA Mynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,

RA Hyysshizaki Y.,

RA Hyysshizaki Y.,
                                    DISULFID
CARBOHYD
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE=Lung;

MEDLINE=21170294; PubMed=10973284;

YU G., Boone T., Delaney J., Hawkins N., Kelley M.J., Ramakrishnan M.

MCCabe S., Qiu W.R., Kornuc M., Xia X.-Z., Guo J., Stolina M.,

MCCabe S., Qiu W.R., Kornuc M., Senaldi G., Theill L.E.;

Boyle W.J., Sarosi I., Hsu H., Senaldi G., Theill L.E.;

"APRIL and TALL-I and receptors BCMA and TACI: system for regulating humoral immunity.";

Nat. Immunol. 1:252-256(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collabora between the Swiss Institute of Bioinformatics and the EMBL outstatic the European Bioinformatics Institute. There are no restrictions on use by non-profit institutions as long as its content is in no modified and this statement is not removed. Usage by and for commer entitles requires a license agreement (See http://www.isb-sib.ch/annou or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; AF294825;
EMBL; AK009514;
                                                                                                                                                                                                                                                                                           PROSITE; PS00251; TNF_1; 1.
PROSITE; PS50049; TNF_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Functional annotation of a full-length mouse cDNA collection.";
                                                                                                                                                                                                                                                                                                                                                                                        [nterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hayashizaki Y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                    GO:0008284; P:positive regulation erPro; IPR006052; TNF family. erPro; IPR008983; TNF like. RT; SM00207; TNF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       proteolytic processing. SIMILARITY: Belongs to the tumor necrosis factor family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MGI:1916833; Tnfsf13.
                                                                                                                                                                                                                                                   Immune response;
                                                                  95
187
115
                                        120
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BAB26332.1; -.
                                                                                                                                                                                              95
241
                                    96
202
115
120
             26889
                                                                                                                                                                                    ; Glycoprotein.
BY SIMILARITY.
TUMOR NECROSIS !
             ¥.
MEMBER 13.
CLEAVAGE (BY FURIN)
POTENTIAL.
N-LINKED (GLCNAC...
MISSING (IN REF. 2).
MISSING (IN REF. 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                              of cell proliferation; IDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (See http://www.isb-sib.ch/announce,
                                                                                                                                                                                              FACTOR LIGAND SUPERFAMILY
          CRC64;
                                                            .) (POTENTIAL).
                                                                                                                                  YB)
                                                                                                                                  SIMILARITY)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                collaboration
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RESULT 4
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Best Local S
Matches 75
                                                                                                                                                                                                                                                    SEQUENCE FR
Farrah T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIINE-98416181; PubMed-9743536; Hahne M., Kataoka T., Schroeter M., Bornand Bodmer J.-L., Schneider P., Bornand Sordat B., Rimoldi D., Tschopp J.; "APRIL, a new ligand of the tumor ne tumor cell growth.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TN13_HUMAN STANDARD; PRT; 250 AA.

075888; Q96HV6; Q9FIM8; Q9FIM9;
16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
10-OCT-2003 (Rel. 42; Last annotation update)
11-0-OCT-2003 (Rel. 42; Last annotation update)
11-0-OCT-2003 (Rel. 42; Last sequence update)
11-0-OCT-2003 (Rel. 40; Last sequence update)
11-0-OCT-2001 (Rel. 40; Last sequence update)
11-0-OCT-2003 (R
                                                                                               SEQUENCE FROM N.A. (ISOFORMS ALPHA;
MEDLINE=20168636; PubMed=107066119;
Kelly K.A., Manos B.J., Jensen G.T.,
"APRIL/TRDL-1, a tumor necrosis fact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (Human).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                  SEQUENCE OF 1-247
                                                                                                                                                                                                            "Homo sapiens tumor necrosis
Submitted (OCT-1999) to the I
                                                                                                                                                                                                                                                                                                                                                             Shu H.-B., Hu W.-H., Johns
"TALL-1 is a novel member
                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=99260341;
                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HUMAN
                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                    Leukoc.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VFGDELSLVTLFRCIQNMPETLPN---NSCYSAGIAKLEEGDELQLAIPRENAQISLDGD
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                                                                                                                                                                                                                                                                                                                    Biol.
                                                          60:1021-1027(2000)
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                  FROM N.A
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Pred. No. 1e-1
10; Mismatches
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                                                                                                      factor-like
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No. 1e-13;
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                                                                                                   ligand,
                                                                                                                                                                   GAMMA.
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80
                                                                                                                          Jones
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                                                                                                                                                                                                                                                       O'Hara
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RA Strausberg R.D., Felingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loguellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Rahesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Rodriguez A.C., Shevin J.E., Jones S.J.M., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length
RT "Generation and initial analysis of more than 15,000 full-length
RT Thuman and mouse cDNA sequences.",
R.L. Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lopez-Fraga M., Fernandez R., Albar J.P., Hahne M.;
"Biologically active APRIL is secreted following intracellul processing in the Golgi apparatus by furin convertase.";
EMBO Rep. 2:945-951(2001).
-i- FUNCTION: Cytokine that binds to TNFRSF13B/TACI and to TNFRSF17/BCMA. May be implicated in the regulation of tugrowth. May be involved in monocyte/macrophage-mediated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=21170294; PubMed=10973284; Yu G., Boone T., Delaney J.; Hawkins N., Kelley M.J., Ramakrishnan M. McCabe S., Qiu M.R., Kornuc M., Xia X.-Z., Guo J., Stolina M., Boyle W.J., Sarosi I., Hsu H., Senaldi G., Theill L.E.; "APRIL and TALL-I and receptors BCMA and TACI: system for regulating humoral immunity"; Nat. Immunol. 1:252-256(2000).
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                                                                                                                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced through a collable between the Swiss Institute of Bioinformatics and the EMBL outst the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for con entities requires a license agreement (See http://www.isb-sib.ch/ar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROCESSING BY FURIN, MUTAGENESIS SUBCELLULAR LOCATION.
   EMBL;
EMBL;
EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=21486098; PubMed=11571266;
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                                                                                                                                                                                                                    or send
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ISOId=075888-3; Sequence=VSP_006451;
TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN TRANSFORMED LINES, CANCERS OF COLON, THYROID, LYMPHOID TISSUES AND SPECIFICALLY EXPRESSED IN MONOCYTES AND MACROPHAGES.
INDUCTION: DOWN-REGULATED BY PHORBOL MYRISTATE ACETATE/TOWN-TREATMENT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       immunological processes.
SUBUNIT: Homotrimer (Potential)
SUBCELLULAR LOCATION: Secreted.
ALTERNATIVE PRODUCTS:
Event=Alternative splicing; Nam
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PTM: The precursor is cleaved by SIMILARITY: Belongs to the tumor
; AF046888; I
; AF136294; I
; AF184972; I
; AF114011; I
; AF114012; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IsoId=075888-2; Sequence=VSP_006450;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IsoId=075888-1; Sequence=Displayed
                                                                                                                                                                                                                    an email to license@isb-sib.ch).
                                      ; AAC61312.1;
; AAD29422.1;
; AAF01321.1;
; AAF59828.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Belongs to the tumor necrosis factor family.
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Best Local &
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CONFLICT
SEQUENCE
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CARBOHYD
VARSPLIC
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MIM; 604472; -.

GO; GO:0005102; F:receptor binding; TAS.

GO; GO:0008184; P:positive regulation of cell proliferation;

GO; GO:0007165; P:signal transduction; TAS.

InterPro; IPR008052; TNF_family.

InterPro; IPR008983; TNF_like.

PFAM; PF00229; TNF; 1.
                                                                                                                                                                                                        PS1742; Q28339;
01-OCT-1996 (Rel. 34, Last sequence update)
01-OCT-1996 (Rel. 34, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
Tumor necrosis factor precursor (TNF-alpha) (Tumor ligand superfamily member 2) (TNF-a) (Cachectin).
TNF OR TNFSF2 OR TNFA.
Canis familiaris (Dog).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; AF114013; AAF59830.1;
EMBL; BC008042; AAH08042.1;
Genew; HGNC:11928; TNFSF13.
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Fiers W.;
"Tumour necrosis factor.";
(In) Sim E. (eds.);
The natural immune system Oxford (1993).
                                                                                                                                          Eukaryota; Metazoa; Chordata; (
Mammalia; Eutheria; Carnivora;
MCBI TaxID=9615;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MUTAGEN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             70;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
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29.7%;
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                         humoral factors,
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Pred. No. 1.6
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F -> L (IN REF. 5).
; AE1A6B9457F6E298 CRC64;
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CLEAVAGE
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Gilmore W.H., Carter S.D., Bennett M., Barnes A., Kelly D.F.;

L. Submitted (MAR-1996) to the EMBL/GenBank/DDBJ databases.

C. -: FUNCTION: Cytokine that binds to TWFRSP1A/TWFR1 and

C. INTERSF1B/TWFBR. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent to pyrogen causing fever by direct action or by stimulation of interleukin 1 secretion and is implicated in the induction of cachexia, Under certain conditions it can stimulate cell proliferation and induce cell differentiation.

C. -: SUBCHLULAR LOCATION: Type II membrane protein. Also exists as interleukin to protein the soluble form (By similarity).

C. -: SUBCELLULAR LOCATION: Type II membrane form by the soluble form derives from the membrane form by
  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
SEQUENCE FROM N.A.

ZUCKER K., Lu P., Fuller L., Asthana D.
ZUCKER K., Lu P., Fuller L., Asthana D.
"Cloning and expression of the cDNA for
"Cloning and expression of the cDNA for the color of the colo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR006053; TNF_abc.
InterPro; IPR006052; TNF_family.
InterPro; IPR006053; TNF_like.
InterPro; IPR003636; TNF_subf.
Pfam; PF00229; TNF; 1.
PRINTS; PR01234; TNBCROSISFCT.
ProDom; PD002012; TNF_subf; 1.
SWART; SM00207; TNF; 1.
                                                                     MOD_RES
DISÜLFID
CONFLICT
CONFLICT
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CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                   Cytokine;
                                                                                                                                                                                                                                                                               DOMAIN
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                                                                                                                                                                                                                                                                                                                                                       DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00251; TNF_1; PROSITE; PS50049; TNF_2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; X94932; CAA64403.1; -. EMBL; S74068; AAB32391.1; -. EMBL; Z70046; CAA93908.1; -. HSSP; P01375; 4TSV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the European Bioinformatics Institute. There are no rest
use by non-profit institutions as long as its content
modified and this statement is not removed. Usage by ar
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     between
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIMILARITY: Belongs to the tumor necrosis factor family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                proteolytic processing (By similarity).

PTM: The membrane form, but not the soluble form, phosphorylated on serine residues. Dephosphorylat membrane form ocurrs by binding to soluble TNFRSF invitation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           similarity)
DISEASE: Ca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cancer and infection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SWISS-PROT entry is copyright. It is produced through a collaboratic een the Swiss Institute of Bioinformatics and the EMBL outstation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 malnutrition
                                                                                                                                                                                                                                                                                                                                                                                                                         Transmembrane;
                                                                                                                                       145
145
145
174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cachexia accompanies a variety of infection, and is characterized
                                                                                                                                                                                                                                                                                                                           233
233
35
56
                                                                     233
77
2
177
177
60
66
74
111
116
                                              25447 MW;
8.2%; Score 118.5;
                                                                                                                                                                                                                                                                                                                                                                                                                       Signal-anchor; Phosphorylation.
                                                                BY SIMILARITY.

QR -> PE (IN REF. 2).

G -> C (IN REF. 2).

A -> V (IN REF. 3).

A -> D (IN REF. 2).

G -> D (IN REF. 2).

IY -> DS (IN REF. 2).
                                                                                                                                                                                                                              EXTRACELLULAR (POTENTIAL)
CLEAVAGE (BY ADAM17) (BY PHOSPHORYLATION (BY CK1)
                                                                                                                                                                                                                                                                                                        SIGNAL-ANCHOR (TYPE-II (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                               TUMOR NECROSIS FACTOR, MEMBRANE TUMOR NECROSIS FACTOR, SOLUBLE F CYTOPLASMIC (POTENTIAL)
                                            7B2588FBC8B25340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  D., Esquenazi V., Miller J.; for canine tumor necrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                moved. Usage by and for commercial (See http://www.isb-sib.ch/announce)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dephosphorylation of t soluble TNFRSF1A/TNFR1
DB
diseases, including by general ill health
                                            CRC64;
Length 233;
                                                                                                                                                                                                                                                                                                                         MEMBRANE PROTEIN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        restrictions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a collaboration - MRL outstation
                                                                                                                                                                                                                                                                                                                                                                        FORM.
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RESULT
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                                                                                                                                                                                                                            Noji Y. Inoue Y. Sugisawa H., Itou T., Endo T., Sakai T.;

Nolecular cloning and functional characterization of bottlenose
of dolphin (Tursiops truncatus) tumor necrosis factor alpha.";

Vet. Immunol. Immunopathol. 82:183-192(2001).

C-!- FUNCTION: Cytokine that binds to TMPRSTAM/TMPRA and
can induce cell death of certain tumor cell lines. It is potent
pyrogen causing fever by direct action or by stimulation of
cachexia, Under certain conditions it can stimulate cell
cachexia, Under certain conditions it can stimulate cell
proliferation and induce cell differentiation (By similarity).

C-!- SUBCILIULAR LOCATION: Type II membrane protein. Also exists as an
extracellular soluble form derives from the membrane form by
proteolytic processing (By similarity).

C-!- PTM: The membrane form, but not the soluble form, if the
protechytic processing (By similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity Matches 54; Conser
                            between the Swiss Institute of Bioinformat
the European Bioinformatics Institute. The
use by non-profit institutions as long
modified and this statement is not removed.
entities requires a license agreement (See
or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TNFA TURTR
Q9BEA1;
28-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TURTR
EMBL; AB049358; BAB39855.1;
                                                                                                                This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tursiops truncatus (Atlantic bottle-nosed dolphin).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Cetacea; Odontoceti; Delphinidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-FBB-2003 (Rel. 41, Created)
28-FBB-2003 (Rel. 41, Last sequence update)
28-FBB-2003 (Rel. 41, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
Tumor necrosis factor precursor (TNF-alpha) (Tumor ligand superfamily member 2) (TNF-a) (Cachectin).
TNF OR TNFSE2 OR TNFA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLINE=21472839; PubMed=11587733;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=9739
                                                                                                                                                                SIMILARITY: Belongs to the tumor necrosis factor family.
                                                                                                                                                                                                  phosphorylated on serine residues. membrane form ocurrs by binding to
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7; Mismatches
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                                              (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                  Dephosphorylation of the soluble TNFRSF1A/TNFR1
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SITE
MOD RES
DISULFID
CARBOHYD
SEQUENCE
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PROSITE; PS00251; TNF 2; 1.

PROSITE; PS50049; TNF 2; 1.

Cytokine; Transmembrane; Signal-anchor; Phosphorylation.

Cytokine; Transmembrane; Signal-anchor; Phosphorylation.

TUMOR NECROSIS FACTOR, MEMBRANE FORM.

CHAIN 78 23 TUMOR NECROSIS FACTOR, SOLUBLE FORM.

78 23 TUMOR NECROSIS FACTOR, SOLUBLE FORM.

DOMAIN 1 35 CYTOPLASMIC (POTENTIAL).

TRANSMEM 36 56 SIGNAL-ANCHOR (TYPE-II MEMBRANE PROFIT
                                                                                                                                                                                                                                                                                                                                                      TNFA_FELCA STANDARD; PRT; 233 AA.

P19101, Q8HYM0;
01-NOV-1990 (Rel. 16, Created)
10-OCT-2003 (Rel. 42, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
Tumor necrosis factor precursor (TNF-alpha) (Tumor ligand superfamily member 2) (TNF-a) (Cachectin).
TNF OR TNFSF2 OR TNFA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HSSP; P01375; 4TSV
                                                                      MEDLINE=91016860; PubMed=2216740;
McGraw R.A., Coffee B.W., Otto C.M., Drews R.T., Rawlings C.A.,
"Gene sequence of feline tumor necrosis factor alpha.";
Nucleic Acids Res. 18:5563-5563(1990).
                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; C
Mammalia; Eutheria; Carnivora;
                                                                                                                                                                                                                                                                                                                                Felis silvestris catus (Cat).
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                                                                                                                                                                                TISSUE=Blood;
                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                 NCBI_TaxID=9685;
SEQUENCE FROM N.A. TISSUE-Bone marrov
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22.7%;
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Pred. No. 0.01
38; Mismatches
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CLEAVAGE (BY ADAM17) (BY
PHOSPHORYLATION (BY CK1)
BY SIMILARITY.
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SEQUENCE OF 95-185 FROM N.A.

SUBSOUTH B.E., Rollo W.A., Venta P.J., Ewart S.L.;

AS SUBSOUTH S.E., Rollo W.A., Venta P.J., Ewart S.L.;

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AS SUBSOUTH S.E., Rollo W.A., Venta P.J., Ewart S.L.;

AS SUBSOUTH S.E., Rollo W.A., Venta P.J., Ewart S.L.;

C. interleukin I secretion and is implicated in the induction of interleukin I secretion and is implicated in the induction of cachexia, Under certain conditions it can stimulate cell proliferation and induce cell differentiation.

C. interleukin J. Under certain conditions it can stimulate cell proliferation and induce cell differentiation.

C. i. SUBCLIULAR LOCATION: Type II membrane protein. Also exists as extracellular soluble form (By similarity).

C. i. FIN: The soluble form derives from the membrane form by proteolytic processing (By similarity).

C. i. PTM: The membrane form, but not the soluble form, is phosphorylated on serine residues. Dephosphorylation of the membrane form occurrs by binding to soluble TNFRSFIA/TNFRI (By similarity).
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"Feline cytok
of cDNA.";
Anim. Biotech
[3]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EN the Enropean Bioinformatics Institute. There are no restruse by non-profit institutions as long as its content modified and this statement is not removed. Usage by and entities requires a license agreement (See http://www.isb-sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.com/sentities.
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PIR; S11688; S11688.
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InterPro; IPR006052; TNF_family.
InterPro; IPR008983; TNF_like.
InterPro; IPR003636; TNF_subf.
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pS0025; TNF 1; 1.

pS0025; TNF 2; 
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G -> R (IN REF. 2

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                                            This SWISS-PROT entry is copyright. It is produced through a collaboratio between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on it use by non-profit institutions as long as its content is in no was modified and this statement is not removed. Usage by and for commercia entitles requires a license agreement (See http://www.isb-sib.ch/announce
                                   or send
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
10-CCT-2003 (Rel. 42, Last annotation update)
Tumor necrosis factor precursor (TNF-alpha) (Tumor ligand superfamily member 2) (TNF-a) (Cachectin).
Typ or TNFSF2 OR TNFA.
Delphinapterus leucas (Beluga whale).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Cetacea; Odontoceti;
Monodontidae; Delphinapterus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DELLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Molecular cloning and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=21618234; PubMed=11768130;
Denis F., Archambault D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  factor-a.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Molecular cloning and characterization of beluga whale (belphinapterus leucas) interleukin-lbeta and tumor necrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q8WNR1;
                                                                                                                                                                                                  cachexia, under cervair controlleration (By similari proliferation and induce cell differentiation (By similari SUBUNIT: Homotrimer (By similarity).

SUBCELLULAR LOCATION: Type II membrane protein. Also exist extracellular soluble form (By similarity).

PTM: The soluble form derives from the membrane form by proteolytic processing (By similarity).

PTM: The membrane form, but not the soluble form, is phosphorylated on serine residues. Dephosphorylation of the membrane form occurs by binding to soluble TNFRSFIA/TNFR1
                                                                                                                                                                        SIMILARITY: Belongs to the tumor necrosis factor family.
                                                                                                                                                                                                                                                                                                                                                                   Induce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin 1 secretion and is implicated in the induction of cachexia, Under certain conditions it can stimulate cell
                                                                                                                                                                                                                                                                                                                                                                                                                     FUNCTION: Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFBR. It is mainly secreted by macrophages induce cell death of certain tumor cell lines. It is
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                                 s requires a license agreement (S an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Vet. Res. 65:233-240(2001)
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                                                (See http://www.isb-sib.ch/announce/
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                                                                                                                                                                                                                                                                                                                                                  similarity)
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                                                                                                                                      a collaboration
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InterPro; IPwo.
( InterPro; IPwo., A InterPro; IPwo.)

InterPro; IPR003636;

IN Pfam; PF00229; TNF; 1.

DR Pfam; PF00229; TNF; 1.

DR PRINTS; PR01234; TNECROSISFCT.

DR PROBOR; P0002012; TNF 1; 1.

DR PROSITE; P500251; TNF 2; 1

Cytokine; Transmembrane; Signal-anchor; Phosphorylation.

Cytokine; Transmembrane; Signal-anchor; Phosphorylation.

Cytokine; Transmembrane; Signal-anchor; Phosphorylation.

Cytokine; Transmembrane; Signal-anchor; Phosphorylation.

TOWNOR NECROSIS PACTOR, SOLUBLE FORM.

CytoplasMic (POTENTIAL).

(POTENTIAL).

(POTENTIAL).

POTENTIAL).

TOWNOR NECROSIS PACTOR, SOLUBLE FORM.

(POTENTIAL).

(POTENTIAL).

(POTENTIAL).

TOWNOR NECROSIS PACTOR, MEMBRANE FORM.

(POTENTIAL).

(POTENTIAL).

(POTENTIAL).
         ACCOMPANA ACCOMP
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Best Local S
Matches 54
                                                                                                                     Shirai T., Shimize ... Shirai T., Shimize ... Shirai T., Shimize ... Shirai rectaining and expression in necrosis factor.";
Agric. Biol. Chem. 53:173
                                                                                                                                                                                                                                                                                                                                                                                                          TNFA_RAT STANDARD; PRT; 235 AA.

P16599; Q9J126; Q9J127;

01-AUG-1990 (Rel. 15, Created)

01-AUG-1990 (Rel. 15, Last sequence update)

10-OCT-2003 (Rel. 42, Last annotation update)

Tumor necrosis factor precursor (TWF-alpha) (Tum

ligand superfamily member 2) (TNF-a) (Cachectin)

TNF OR TNFSC OR TNFA.

Rattus norvegicus (Rat).
MEDIINE=92329007; PubMed=1627266;
Estler H.C., Grewe M., Gaussling R., Pavlovic M., Decker K.;
"Rat tumor necrosis factor-alpha. Transcription in rat Kupffer
                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
Shirai T., Shimizu N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                          SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SPCQRETPEGAEAKPWYEPIYQGGVFQLEKGDRL---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            --CIQNMPETLP----NNSCYSAGIAKLEEGDELQLAIPRENAQISL-----DGDVTF
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IPR006052; TNF_family.
IPR008983; TNF_like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   233 AA;
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                                                                                                                                                 53:1733-1736(1989)
                                                                                                                                                                                                                                                                                                                                                     Chordata;
Rodentia;
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n in Escherichia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 110.5; DB Pred. No. 0.033;
                                                                                                                                                                                                                                                                                                                                                        Craniata; Vertebrata;
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2DF37DCB2BC9E961 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (Tumor necrosis
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                                                                                                                                                                                                                                                                                                                                                        Euteleostomi;
; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ----TGYSIISPLA
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                                                                                                                                                                                                            rat tumor
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A Kirisis M.J., Vardimon D., Kunz H.W., Gill T.J. III;
Submitted (JUN-1993) to the EMBL/GenBank/DDBJ databases.

- FUNCTION: Cytckine that binds to TNFRSF1A/TNFR1 and
TNFRSF1B/TNFBR. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent to pyrogen causing fever by direct action or by stimulation of cachexia, Under certain conditions it can stimulate cell proliferation and induce cell differentiation.

--- SUBCINIT: Homotrimer (By similarity).

--- SUBCILIULAR LOCATION: Type II membrane protein. Also exists as an extracellular soluble form (By similarity).

--- FTM: The soluble form derives from the membrane form by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=94040766; PubMed=8224868; Kwon J., Chung I.Y., Benveniste E.N.; "Cloning and sequence analysis of the factor-encoding genes."; Gene 132:227-236(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and in cDNA.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A., AND VARIANTS PRO-122 AND GLU-190 STRAIN-Dark Agout;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wilder R.L., Remmers E.F.;
Wilder R.L., Remmers E.F.;
"Polymorphisms of the tumor necrosis factor alpha locus among
"Polymorphisms of the tumor necrosis factor alpha locus among
"Polymorphisms of the tumor necrosis factor alpha locus among
                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Seidel M.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Furuya T., Joe
Wilder R.L., R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN=ACI/SegHsd,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN=Sprague-Dawley; TISSUE=Testis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Biol. Chem.
                  EMBL;
                                               EMBL;
                                                                              EMBL; D00475; BAA00367.1; -.
EMBL; X66539; CAA47146.1; -.
EMBL; L00981; AAA16275.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE=Tail
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF 1-231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "TNF-alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=21369712; PubMed=11477479;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LEW/NHsd;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                EMBL;
                                                                                                                                                                                                                                                                        and malnutri
SIMILARITY:
                                                                                                                                                                                                                                                                                                                                                      proteolytic processing (By similarity).

PTM: The membrane form, but not the soluble form, is phosphorylated on serine residues. Dephosphorylation membrane form ocurrs by binding to soluble TNFRSF1A/
                                                                                                                                                                                                                                                                                                                      similarity).
DISEASE: Cac
AF329982; AAK53568.1; -..., AF329983; AAK53569.1; -..., AF329985; AAK53570.1; -..., AF329985; AAK53571.1; -..., AF329986; AAK53572.1; -...
                                                                                                                                                                                                                                                                                                        cancer and infection,
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in rats with collagen-induced arthritis.";
the EMBL/GenBank/DDBJ databases.
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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JFR008983; TNF like.
JFR003636; TNF subf.
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TUMOR NECROSIS FACTOR, MEMBRANE FORM.
TUMOR NECROSIS FACTOR, SOLUBLE FORM.
CYTOPLASMIC (POTENTIAL).
SIGNAL-ANCHOR (TYPE-II MEMBRANE PROTEIN)
(POTENTIAL).
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Submitted
[10]
                 SEQUENCE FROM N.A.

Rowen L., Qin S., Madan A., Abbasi N., James R., Dickhoff Shaffer T., Ratcliffe A., Loretz C., Lasky S., Hood L.; "Sequence of the mouse major histocompatibility class III Submitted (OCT-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                   STRAIN=CTS, and NOU;
MEDLINE=96013654; PubMed=7560085;
Makino S., Yamato E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Semon D., Kawashima E., Jongeneel C.V., Shakhov A.N., Nedospasov S.A. "Nucleotide sequence of the murine TNF locus, including the TNF-alpha (tumor necrosis factor) and TNF-beta (lymphotoxin) genes.";
Nucleic Acids Res. 15:9083-9084(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MREDLINE=87298639; PubMed=3040015;
Shakhov A.N., Nedospasov S.A.;
"Molecular cloning of genes coding
Complete nucleotide sequence of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=97246744;
Iraqi F., Teale A.
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Takekawa K., Ogihara T.;
"Identification of a new susceptibility
diabetes mellitus by ancestral haplotype
J. Clin. Invest. 96:1936-1942(1995)
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Nucleic Acids Res. 13:4417-4429(1985).
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Kawashima E., Chollet A., Tizard R
Ruysschaert M.-R., Fiers W.;
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MEDLINE=86149365; PubMed=2419912;
Caput D., Beutler B., Hartog K.,
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Baeyens K.J., De Bondt H.L., Raeymaekers A., Fiers W., De Ra "The structure of mouse tumour-necrosis factor at 1.4 A reso towards modulation of its selectivity and trimerization."; Acta Crystallogr. D 55:772-778(1999).

-!- FUNCTION: Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/NFRB. It is mainly secreted by macrophages and induce cell death of certain tumor cell lines. It is pot pyrogen causing fever by direct action or by stimulation interleukin 1 secretion and is implicated in the inducticachexia, Under certain conditions it can stimulate cell proliferation and induce cell differentiation.

-!- SUBUNIT: Homotrimer.

-!- SUBUNIT: Homotrimer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE OF 1-96 FROM N.A.

STRAIN=BLG2/Msf, BFM/2Msf, C57BL,
NJL/Msf, pgn2, and SWN/Msf;
Liu Y., Kitano T., Koide T., Shi:
"Conspicuous differences among grive Mus musculus subspecies.",
Submitted (FEB-2000) to the EMBL,
    EMBL;
EMBL;
EMBL;
EMBL;
EMBL;
EMBL;
                                                                                                                                                                                use by non-profit institutions as modified and this statement is not rementities requires a license agreement or send an email to license@isb-sib.cl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=91097531; PubMed=2268312; Sherry B., Juc D.-M., Zentella A., Cerami A.; "Characterization of high molecular weight glycosy murine tumor necrosis factor."; Biochem. Biophys. Res. Commun. 173:1072-1078(1990)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Alternative cleavage of the cachectin/tumor necrosis fact propeptide results in a larger, inactive form of secreted J. Biol. Chem. 264:16256-16260(1989).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE-88165056; PubMed=3349526;
Kriegler M., Perez X., Defay K., Albert I.,
"A novel form of TNF/Cachectin is a cell sur
transmembrane protein: ramifications for the
                                                                                                                                                                                                                                                                    the European
                                                                                                                                                                                                                                                                                       between
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MEDLINE=99190964; PubMed=10089307;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
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                                                                                                                                                                                                                                                                                                                                         similarity).

DISEASE: Cachexia accompanies a variety of diseases, includencer and infection, and is characterized by general ill and malnutrition.

SIMILARITY: Belongs to the tumor necrosis factor family.
                                                                                                                                                                                                                                                                                                                                                                                                                                   proteclytic processing.
protec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             extracellular soluble form.
PTM: The soluble form derives
                                                                                                                                                                                                                                            SWISS-PROT entry is copyright. It is produced through en the Swiss Institute of Bioinformatics and the En European Bioinformatics Institute. There are no restrictly non-profit institutions as long as its content
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  M13049;
X02611;
M38296;
Y00467;
U06950;
D84196;
                                                                                                                          M20155;
M11731;
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AAA40458.1;
AAA40457.1;
CAA26457.1;
CAA26457.1;
AAA40459.1;
CAA68530.1;
AAA18594.1;
BAA19512.1;
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    ALT_SEQ
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Dephosphorylation of the
soluble TNFRSF1A/TNFR1 ()
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RESULT 11
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PDB; 2TNF; 12-CCT-99;

MGD; MGI:104798; Thf.

GO; GO:0005952; P:defense response; IMP.

GO; GO:0006952; P:development; IMP.

GO; GO:0006959; P:humoral immune response; IMP.

GO; GO:0006959; P:norganogenesis; IMP.

GO; GO:0042127; P:regulation of cell proliferation; IDP.

R InterPro; IPR006053; TNF_damily.

R InterPro; IPR006053; TNF_family.

R InterPro; IPR008053; TNF_Subf.

R InterPro; IPR003636; TNF_Subf.
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Best Local
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ProDom; PD002012; TNF_subf; 1.
SMART; SM00207; TNF; 1.
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PROSITE; PS50049; TNF_2; 1.

Cytokine; Transmembrane; Signal-anchor; Phosphorylation; Glycoprotein;
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D84195;
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                                                                                                                                                                                            PKDTPEGAELKPWYEPIYLGGVFQLEKGDQLSAEVNLPKYLDFAESGQV
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BAA19512.1;
BAA19513.1;
BAA19513.1;
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    STANDARD; 
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Pred. No. 0.0
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TUMOR NECROSIS FACTOR, SOLUBLE FORM.
CYTOPLASMIC (POTENTIAL).
SIGNAL-ANCHOR (TYPE-II MEMBRANE PROTEIN)
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CLEAVAGE (BY ADAM17) (BY
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01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
Tumor necrosis factor precursor (TNF-alpha) (Tumor ligand superfamily member 2) (TNF-a) (Cachectin).
TNF OR TNESE2 OR TNFA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
MEDLINS=94083525; PubMed=8260599;
MIDDINS=94083525; PubMed=8260599;
Cludts I., Cleuter Y., Kettmann R., Burny A., Droogmans
"Cloning and characterization of the tandemly arranged k
"Cloning and tumour necrosis factor-alpha genes.";
lymphotoxin and tumour necrosis factor-alpha genes.";
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Mammalia; Eutheria; Ce
Bovidae; Bovinae; Bos.
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and tumor necrosis factor alpha."; Immunogenetics 42:430-431(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=96006582; PubMed=7590981; Mertens B.E.L.C., Muriuki M., Gai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=Boran, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=9913;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bos taurus (Bovine).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=97447737; PubMed=9303477;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF 89-193 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Cloning of two members of the TNF-superfamily in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-Blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytokine 5:336-341(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE OF
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ine TNF-alpha on the TNF-alpha of TNF-alpha
                                                                                                                                                                   SIMILARITY: Belongs to the tumor necrosis factor family
                                                                                                                                                                                                           cancer and infection,
                                                                                                                                                                                                                                   DISEASE:
                                                                                                                                                                                                                                                     similarity)
                                                                                                                                                                                         malnutrition.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          vF-alpha gene.";
(JUL-1997) to t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (FEB-2001) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     50-233 FROM N.A.
                                                                                                                                                                                                                                   Cachexia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N'Dama;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chordata; Craniata; Vertebrata; Euteleostomi; Cetartiodactyla; Ruminantia; Pecora; Bovoidea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                           accompanies a variety of ion, and is characterized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaidulis L.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 databases
                                                                                                                                                                                                           diseases,
by general
                                                                                                                                                                                                           seases, including general ill health
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cattle: CD40 ligand
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                                                                                                              a collaboration
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local :
                                                                                                                                                 P36939;
01-JUN-1994
01-JUN-1994
10-OCT-2003
                                                                               01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
Tumor necrosis factor precursor (TWF-alpha) (Tumor necrosis ligand superfamily member 2) (TNF-a) (Cachectin).
TNF OR TNFSE2 OR TNFA.
                Peromyscus leucopus (White-footed mouse).
Eukaryota; Metazoa; Chordata; Craniata; V
Mammalia; Eutheria; Rodentia; Sciurognath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SITE
MOD_RES
DISULFID
VARIANT
CONFLICT
CONFLICT
CONFLICT
CONFLICT
Peromyscus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE; PS00251; TNF_1; 1.
PROSITE; PS50049; TNF_2; 1.
Cytokine; Transmembrane; Signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRINTS; PR01234; TNECROSISFCT.
ProDom; PD002012; TNF subf; 1.
SMART; SM00207; TNF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro; IPR006053; TNF abc.
InterPro; IPR006052; TNF family.
InterPro; IPR008983; TNF like.
InterPro; IPR003636; TNF subf.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DOMAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pfam; PF00229; TNF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HSSP; P01375; 4TSV
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AF011926; AAB84086.1; -..
AF348421; AAN76506.1; -..
AF011927; AAB84087.1; -..
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Ull040; AAA19573.1; ALT_SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                 FGALKL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ALEEKENKILVKETGYFFIYGQVLYTDK----TYAMGHLIQRKKVHVFGDELSLVTLFR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 --CIQNMETLP----NNSCYSAGIAKLEEGDELQLAIPRENAQISL-----DGDVTF
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113
166
233
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                                                                                                                                                                                                                                         STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                               284
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56
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 108; DB
Pred. No. 0.05
42; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BY SIMILARITY.

F -> C (IN STRAIN N'DAMA).

E -> EQ (IN REF. 3 AND 4).

M -> V (IN REF. 3).

K -> R (IN REF. 3).
              Craniata; Ver
Sciurognathi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EXTRACELLULAR (POTENTIAL).
CLEAVAGE (BY ADAM17) (BY S
PHOSPHORYLATION (BY CK1) (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL-ANCHOR (TYPE-II MEMBRANE PROTEIN) (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             lal-anchor; Phosphorylation; Polymorphism.
TUMOR NECROSIS FACTOR, MEMBRANE FORM.
TUMOR NECROSIS FACTOR, SOLUBLE FORM.
CYTOPLASMIC (POTENTIAL).
                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8AF55C002A9763B0 CRC64;
                                                                                                                                                                                                                                         235
              Vertebrata; Euteleostomi;
thi; Muridae; Sigmodontinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1;
0.054;
                                                                                                                                                                                                                                         A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 233;
                                                                                                                                                                                                                                                                                                                                                                                                                                         -SAEINLPDYLDYAESGQVY
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(BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -PSINS----
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                                                                                                                              factor
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                                                                                                                                                                                                              Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                interleukin 1 secretion and is implicated in the induction of cachexia, Under certain conditions it can stimulation of proliferation and induce cell differentiation.

-!- SUBUNIT: Homotrimer (By similarity).

-!- SUBCELLULAR LOCATION: Type II membrane protein. Also exists as an extracellular soluble form (By similarity).

-!- PTM: The soluble form derives from the membrane form by proteolytic processing (By similarity).

-!- PTM: The membrane form, but not the soluble form, is phosphorylated on serine residues. Dephosphorylation of the membrane form occurs by binding to soluble TNFRSFIA/TNPD' '-- DISRASE' ---
                                                                                                                                                                              MOD RES
DISULFID
CARBOHYD
                                                                                                                                                                                                                          DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               between the Swiss Institute. Instructions as long as its content hy mon-profit institutions as long as its content in the content institutions as long as its content institutions.
                                                                                                                                                                                                                                                                                                                              PROSITE; PS00251; TNF 1; 1.

PROSITE; PS50049; TNF 2; 1.

Cytokine; Transmembrane; Signal-anchor; Phosphorylation
                                                                                                                                                                                                                                                                                                                                                                            PRINTS; PR01234; TNECROSISFCT ProDom; PD002012; TNF subf; 1 SMART; SM00207; TNF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            use by non-profit institutions as lon modified and this statement is not remove entities requires a license agreement (S or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This
                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; M59233; AAA40596.1;
PIR; I54490; I54490.
                                                                                                                                                                                                                                                                                         DOMAIN
                                                                                                                                                                                                                                                                                                                      CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                          Pfam; PF00229; TNF; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro; IPR008983; InterPro; IPR003636;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HSSP; P06804; 2TNF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <del>-</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      reromyscus leucopus (family Cri
Immunogenetics 35:351-353(1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Crew M.D., Filipowsky M.E.; "Sequence of the tumor necrosis factor/cachectin (TNF)
                                                                                                                                                                                                                                                                      TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR006052;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro; IPR006053;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
MEDLINE=92218012; PubMed=1348497;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=10041;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and malnutrition. SIMILARITY: Belongs to the tumor necrosis factor family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             similarity)
DISEASE: Ca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FUNCTION: Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFBR. It is mainly secreted by macrophages induce cell death of certain tumor cell lines. It is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISEASE: Cachexia accompanies a variety of diseases, including cancer and infection, and is characterized by general ill health
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                           60
                                              32
                                                                                                      l Similarity
54; Conserv
CLSLFSFLLVAGATTLFCLLNFGVIGPQREEKFP--NNLPIIG--
                                                                         CLTVVSFYQVAALQGDLASLRAELQG-HHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPP
                                                                                                                                                                 86
235 AA;
                                                                                                       Conservative
                                                                                                                                                                                                                            57
79
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80
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179
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355
56
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25822
                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TNF_abc.; TNF_family.; TNF_like.; TNF_subf.
                                                                                                                 7.48;
22.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (family Cricetidae).";
                                                                                                                                                                   WW.
                                                                                                       46;
                                                                                                                                                                            EXTRACELLULAR (POTENTIAL).
CLEAVAGE (BY ADAM17) (BY SI
PHOSPHORYLATION (BY CK1) (I
BY SIMILARITY.
N-LINKED (GLCNAC...) (PO
                                                                                                    Score 107.5; DB Pred. No. 0.061; 6; Mismatches
                                                                                                                                                                                                                                                                      TUMOR NECROSIS FACTOR, MEMBRANE FORM.
TUMOR NECROSIS FACTOR, SOLUBLE FORM.
CYTOPLASMIC (POTENTIAL).
SIGNAL-ANCHOR (TYPE-II MEMBRANE PROTI
                                                                                                                                                                                                                                                         (POTENTIAL)
                                                                                                                                                                   235A5CFC9F9AC624 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (See http://www.isb-sib.ch/announce/
                                                                                                                                 DB 1;
                                                                                                       84;
                                                                                                       Indels
                                                                                                                                   Length
                                                                                                                                                                                                                                                                       MEMBRANE PROTEIN)
                                                                                                                                                                                 (POTENTIAL)
                                                                                                                                                                                                                          SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     restrictions
                                                                                                                                                                                                            (BY SIMILARITY)
                                              -SMAQTLTLR-----
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                                                                                                    Gaps
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P23563;
01-NOV-1991 (Rel.
01-NOV-1991 (Rel.
10-OCT-2003 (Rel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-OCT-2003 (Rel. 20, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
Tumor mecrosis factor precursor (TNF-alpha) (Tumor necrosis factor ligand superfamily member 2) (TNF-a) (Cachectin).
TNF OR TNFSF2 OR TNFA.
Sus scrofa (54-4)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kuhnert P., Wuethrich C., Peterhans E., Pauli U.; "The porcine tumor necrosis factor-encoding genes: comparative analysis.";
                                                                                                                                                            -i- 1
                                                                                                                                                                               SEQUENCE OF 44-232 FROM N.A.
MEDLINB=90034181; PubMed=2478420;
Pauli U., Beutler B., Peterhans E.;
"Porcine tumor necrosis factor alpha:
chain reaction and determination of the Gene 81:185-191(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=Large white; TISSUE=Fibroblast;
MEDLINE=21108615; PubMed=11169259;
Chardon P., Rogel-Gaillard C., Cattolico L., Duprat S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE=91016861; PubMed=2216741;
Drews R.T., Coffee B.W., Prestwoo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae;
                                                                                                                                                                                                                                                                                                                                                          "Sequence of the swine major his containing all non-classical clarissue Antigens 57:55-65(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 necrosis factor-alpha.";
Anim. Biotechnol. 2:97-105(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Choi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE=Macrophage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=91340150; PubMed=1874444;
Kuhnert P., Wuethrich C., Peterhans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Renard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Choi C.S., Molitor T.W., Lin (
FUNCTION: Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFBR. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin 1 secretion and is implicated in the induction of cachexia. Under certain conditions it can stimulate cell proliferation and induce cell differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      102:171-178 (1991).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         e B.W., Prestwood A.K., porcine tumor necrosis. 18:5564-5564(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ----PVAHVVANHQVDEQLEWLSRGANALL------ANGM
                                                                                                                                                                                                                                                                                                                                                                                        histocompatibility complex class I genes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G.F., Murtaugh M.P.;
e of a cDNA encoding ;
                                                                                                                                                                                                           a: cloning with the polymerase
the nucleotide sequence.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              232
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Best Local 9
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EMBL; X54859; CAA36839.1; -.
EMBL; X57321; CAA40591.1; -.
EMBL; AJ251914; CAB63852.1; -.
EMBL; M2079; AAA31128.1; -.
EMBL; M2007; AAA31128.1; -.
FIR; S12606; S12606
HSSP; P01375; 4TSV.
                                                                                                                                                                                                                                                                                                                         DOMAIN
SITE
MOD_RES
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -:- SUBUNIT: Homotrimer (By similarity).

-: SUBCELLULAR LOCATION: Type II membrane protein. Also exist extracellular soluble form (By similarity).

-:- PTM: The soluble form derives from the membrane form by proteolytic processing (By similarity).

-:- PTM: The membrane form, but not the soluble form, is phosphorylated on serine residues. Dephosphorylation of the membrane form occurs by binding to soluble TNFRSF1A/TNFR1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro; IPR006053; TNF abc.
InterPro; IPR006052; TNF family.
InterPro; IPR008083; TNF like.
InterPro; IPR003636; TNF subf.
Pfam; PF00229; TNF; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS00251; TNF_1; 1.
PROSITE; PS5,0049; TNF_2; 1.
Cytokine; Transmembrane; Signal-anchor; Phosphorylation.
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DISEASE: Ca
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                            174
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                                                                                                                                                                                                                                                                                Similarity
                                                                                                              ALEEKENKILVKETGYFFIYGQVLYTDK-----TYAMGHLIQRKKVHVFGDELSLVTLFR
                                                                                                                                                                        PGEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKR----GS
                                                                                                                                                                                                      CLSLFSFLLVAGATTLFCLLHFEVIGPQKEEFPAGP-----
                                                                                                                                                                                                                                    CLTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPA
FGALKL 284
                            SPCQRETPEGAEAKPWYEPIYLGGVFQLEKDDRL---
                                                                                   GVKLKDNQLVVPTDGLYLIYSQVLFRGQGCPSTNVFLTHTISRIAVS-YQTKVNLLSAIK
                                                       CIQNMPETLENNSCYS----AGIAKLEEGDELQLAIPRENAQISL-----DGDVTF
                                                                                                                                                                                                                                                                                                                          232 AA;
                                                                                                                                                                                                                                                                  Conservative
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35
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EXTRACELLULAR (POTENTIAL).

CLEAVAGE (BY ADAM17) (BY S

PHOSPHORYLATION (BY CK1) (C

BY SIMILARITY.
                                                                                                                                                                                                                                                             Score 107; DB
Pred. No. 0.060
40; Mismatches
                                                                                                                                               DKPVAHVVANVKAEGQ-
                                                                                                                                                                                                                                                                                                                                                                                                               TUMOR NECROSIS FACTÓR, MEMBRANE FORM.
TUMOR NECROSIS FACTOR, SOLUBLE FORM.
CYTOPLASMIC (POTENTIAL).
SIGNAL-ANCHOR (TYPE-II MEMBRANE PROTEIN)
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                               -SAEINLPDYLDFAESGQVY
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l ill health
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RESULT 14
TNFA_CAPHI
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P13296; Q28320; O1-JAN-1990 (Rel
                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (JAN-1994) to the EMBL/GenBank/DDBJ databases.

1. FUNCTION: Cytckine that binds to TWFRSFIA/TWFRI and TWFRSFIB/TWFRE. It is mainly secreted by macrophages and carinduce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin 1 secretion and is implicated in the induction cachexia, Under certain conditions it can stimulate cell
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28-FEB-2003 (Rel. 41, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
Tumor necrosis factor precursor (TNF-alpha) (Tumor necrosis factor ligand superfamily member 2) (TNF-a) (Cachectin).
TNF OR TNFSF2 OR TNFA.
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Wang B., Zhang Y.;
"Goat ovarian TuF alpha cDNA
Submitted (JUN-2000) to the E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 41-234 FROM N.A.
Goldstein I.M., Henner D., Talhouk A.;
Submitted (MAR-1989) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE=Splenocyte; Tatsumi M.;
Takakura H., Mori Y., Tatsumi M.;
"Molecular cloning of caprine TNF-alpha cDNA and its expression E.coli and insect cells.";
E.coli and insect cells.";
Submitted (JUL-1996) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Capra hircus (Goat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=9925;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FISSUE=Blood;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 44-234 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          proliferation and induce cell differentiation.
SUBUNIT: Homotrimer (By similarity)
SUBCELIULAR LOCATION: Type II membrane protein. Also exists extracellular soluble form (By similarity).
PTM: The soluble form derives from the membrane form by proteolytic processing (By similarity).
PTM: The membrane form, but not the soluble form, is phosphorylated on serine residues. Dephosphorylation of the membrane form occurrs by binding to soluble TNFRSF1A/TNFR1 (Existing the course of the membrane form occurrs by binding to soluble TNFRSF1A/TNFR1 (Existing the course of the course of the membrane form occurrs by binding to soluble TNFRSF1A/TNFR1 (Existing the course of the cou
                                                                                                                                                                                                                                                                                                                                         CAUTION:
                                                                                                                                                                                                                                                                                                                                                              and malnutrition.
SIMILARITY: Belon
                                                                                                                                                                                                                                                                                                                                                                                                                                               similarity)
DISEASE: Ca
                                                                                                                                                                                                                                                                                                       frameshift in position 60.
                                                                                                                                                                                                                                                                                                                                                                                                                  cancer and infection,
                                     D86587;
                                                                                                                                                                                                                                                                                                                                 Réf.2 sequence
                                                                                                                                                                                                                                                                                                                                                                                                                  Cachexia accompanies nd infection, and is
BAA13130.1; -.
CAA32937.1; ALT_FRAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                Belongs to the tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FROM N.A.
                                                                                                                                                                                                                                                                                                                                    the tumor necrosis factor family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A sequence.";
EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                     s a variety of characterized
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by genera
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Best Local S
Matches 53
                                                                                                                           TNFA LAMGL
P59694;
10-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CONFLICT
CONFLICT
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CONFLICT
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CONFLICT
CONFLICT
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SITE
DISULFID
                               Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=9844;
                                                                                          10-OCT-2003 (Rel. 42, Created)
10-OCT-2003 (Rel. 42, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
10-OCT-2003 (Rel. 42, Last annotation update)
Tumor necrosis factor precursor (TMF-alpha) (Tum
ligand superfamily member 2) (TNF-a) (Cachectin)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRINTS; PR01234; TNECROSISFCT
ProDom; PD002012; TNF subf; 1.
SMART; SM00207; TNF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; AP276985; AAF87741.1;
EMBL; X77317; CAA54523.1; --
PIR; S06192; S06192.
HSSP; P01375; 4TSV.
 SEQUENCE FROM N.A.
Raadan O., Lee S.,
                                                                               ligand superfamily member TNF OR TNFSF2 OR TNFA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS50049; TNF_2; 1.
Cytokine; Transmembrane; Signal-anchor; Phosphorylation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS00251; TNF_1; 1. PROSITE; PS50049; TNF_2; 1.
                                                                     Lama glama (Llama).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DOMAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nterPro; IPR008983; nterPro; IPR003636;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nterPro; IPR006052;
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88
                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                     ALEEKENKILVKETGYFFIYGQVLY-----TDKTYAMCHLIQRKKVHVFGDELSLVTLFR 231
                                                                                                                                                                                                                       SPCHRETPEGAEAKPWYEPIYQGGVFQLEKGDRLSAEINQPEYLDYAESGQVYFGIIAL
                                                                                                                                                                                                                                            --CIQNMPETLP----NNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKL
                                                                                                                                                                                                                                                                   GVELKDNQLVVPTDGLYLIYSQVLFRGHGCPSTPLFLTHTISRIAVS-YQTKVNILSAIK 175
                                                                                                                                                                                                                                                                                                                PLVQTLRSSSQASSNKPVA-
                                                                                                                                                                                                                                                                                                                                                              SCWCLSLFSFLLVAGATTLFCLLHFGVIGPQRE-----
                                                                                                                                                                                                                                                                                                                                                                                  SC-CLTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFE
                                                                                                                                                                                                                                                                                                                                      PPAPGEGNSSONSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGS
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234 AA;
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  Yoshida
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234
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435
                                              Chordata; Craniata; Vertebrata; Euteleostomi; Cetartiodactyla; Tylopoda; Camelidae; Lama.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TNF_abc:
; TNF_family.
; TNF_like.
; TNF_subf.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       25519
                                                                                                                                                                                                                                                                                                                                                                                                                     7.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       MW;
  ×
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R -> S (IN REF. 4).
E -> A (IN REF. 4).
T -> N (IN REF. 4).
H -> Q (IN REF. 4).
Y -> D (IN REF. 4).
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Y -> U (IN REF. 4).
E -> EG (IN REF. 2).
MISSING (IN REF. 2).
                                                                                                                                                                                                                                                                                                                                                                                                          Score 106.5; DB 1;
Pred. No. 0.073;
7; Mismatches 104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PHOSPHORYLATION (BY CLEAVAGE (BY ADAM17) BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EXTRACELLULAR (POTENTIAL)
PHOSPHORYLATION (BY CK1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TUMOR NECROSIS FACTOR, MEMBRANE FORM.
TUMOR NECROSIS FACTOR, SOLUBLE FORM.
CYTOPLASMIC (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-LINKED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIGNAL-ANCHOR (TYPE-II MEMBRANE PROTEIN)
                                                                                                                                                                PRT;
 Chang
                                                                                                                                                                                                                                                                                                                                                                                                                                                       9768E33BBBABB041 CRC64;
                                                                                                                                                                                                                                                                                                                ----HVVANISAP---
×.
                                                                                                                                                                233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GLCNAC
  Ohashi K.,
                                                                                                                                                               Ą
                                                                                                      (Tumor necrosis factor
                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                              ·----EQSP---AGPSFNR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BY SIMILARITY)
  Sugimoto
                                                                                                                                                                                                                                                                                                               -GQLRWGDSYANALKAN 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (BY SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                 234;
                                                                                                                                                                                                                                                                                                                                                                                                          45;
                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                             284
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Query Match
Best Local S
Matches 53
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                         DOMAIN
MOD RES
SITE
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cytokine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; AB107646; BAC75383.1; ...
InterPro; IPR008052; TNF family.
InterPro; IPR009893; TNF like.
InterPro; IPR003636; TNF subf.
Pfam; PF00229; TNF; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProDom; P0002012; TNF subf;
SMART; SM00207; TNF; 1:
PROSITE; PS00251; TNF 1: 1.
PROSITE; PS50049; TNF 2: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TRANSMEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            similarity).
SIMILARITY: Belongs to the tumor necrosis factor family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      proteolytic processing (By similarity).

PTM: The membrane form, but not the Soluble form, is phosphorylated on serine residues. Dephosphorylation of the membrane form ocurrs by binding to soluble TNFRSF1A/TNFR1 (By
175
                                     232 --C---IQNMPETLP-NNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKL 284
                                                                                                                                                                    75 QTLRSSSQASRDKPVAHVVADPAAQGQLQ------
                                                                                                                                                                                                                                                     32 CLSLFSFLLVAGATTLFCLLHFGVIGPQKEEL-----
                                                                                                                                                                                                                                                                                           60 CLTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPA 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PD002012; TNF_subf; 1.
                                                                                                                                                                                                                                                                                                                                                         Similarity
SPCQGGTSEEAEAKPWYEPIYLGGVFQLEKDDRLSAEINMPNYLDFAESGQVYFGIIAL 233
                                                                                GVKLEDNOLVVPTDGLYLIYSQVLFSGORCPSTFVFLTHTISRLAVS-YPNKANLLSAIK 174
                                                                                                                 ALEEKENKILVKETGYFFIYGQVLYTDK----TYAMGHLIQRKKVHVFGDELSLVTLFR 231
                                                                                                                                                                                                             PGEGNSSONSRNKRAVOGPEETVTODCLQLIADSETPTIOKGSYTFVPWLLSFKR---GS 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Transmembrane; Signal-anchor; Phosphorylation.

1 233 TUMOR NECROSIS FACTOR, MEME
                                                                                                                                                                                                                                                                                                                                                                                                                       145
233 AA;
                                                                                                                                                                                                                                                                                                                                       Conservative
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76
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                                                                                                                                                                                                                                                                                                                                                                                                                       25437 MW;
                                                                                                                                                                                                                                                                                                                                     7.3%; Score 105.5; DB 1; 22.2%; Pred. No. 0.089; tive 34; Mismatches 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIMILARITY).

SIMILARITY).

CYTOPLASMIC (POTENTIAL).

CYTOPLASMIC (TYPE-II MEMBRANE PROTEIN)
                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                               EXTRACELLULAR (POTENTIAL).

PHOSPHORYLATION (BY CK1) (BY SIMILARITY).

CLEAVAGE (BY ADAM17) (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TUMOR NECROSIS FACTOR, SOLUBLE FORM (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                          F5C07837505FBD86 CRC64;
                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 233;
                                                                                                                                                                                                                                                     ----LTGLQIMNPLA 74
                                                                                                                                                                       ----WEKRFANTLLAN 115
                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEMBRANE FORM (BY
                                                                                                                                                                                                                                                                                                                                         51;
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Search completed: August 25, 2004, 14:39:28 Job time : 15.3939 secs

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OM protein - protein search, using sw model
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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Perfect score:
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                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
 1335.5
1069
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831.5
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seq length: 2000000000
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1: sp_archea:*

2: sp_bacteria:*

3: sp_fungi:*

4: sp_human:*

4: sp_human:*
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Gapop 10.0 , Gapext 0.5
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1451
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                                                                  92.0
73.7
61.8
59.4
57.4
56.0
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23.4
23.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                               sp_organelle:*
sp_phage:*
sp_plant:*
                                                                                                                                                                                                                                                                                                                                                                                               sp_invertebrate:*
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sp_unclassified:*
sp_unclassified:*
sp_rvirus:*
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                                                                                                                                                                                       Length
  DB
 Q81Z15
Q82Z16
Q91Z14
Q91Z14
Q81WPJ
Q88WPJ
Q8BWPZ
Q8BWPZ
Q8BWSZ
Q8BWFZ
Q8BWSZ
Q8BWSZ
Q8BWSZ
Q8WFM7
Q8IZK7
Q8IZK7
Q8MRWZ
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Q9WGWZ
Q8WWJ1
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Q8IZI6
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Q7z5j2 homo sapien
Q8izi6 homo sapien
Q8izi6 homo sapien
Q8izi6 homo sapien
Q8izi6 mus musculu
Q7tq58 mus musculu
Q8izi4 homo sapien
Q8jh)4 gallus gall
Q8bya9 mus musculu
Q8hi7 homo sapien
Q8izk7 homo sapien
Q8izk7 homo sapien
Q8my2 drosophila
Q9w5g2 drosophila
Q9w5g2 drosophila
Q8muj1 drosophila
Q8muj1 drosophila
                                                                                                                                                                                        Description
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93.5	94	94	94	94	94	94	94	94	94	4	94.5	4		4	95	95.5	97	97.5	98	99	9	9	100.5	101	102	102	104.5	
6.4	6.5														6.5				٠	٠		•	•	•	•	•	•	•
214	1883	1711	m	(4)	(L)	u	1264	1068	820	347	246	246	237	215	289	252	217	1596	255	251	420	217	205	409	409	287	255	252
σ	4	ហ	ហ	4	4	4	4.	4	4	16	13	13	13	11	17	11	μ	ω	w		σ					13	13	11
Q9BEF3	Q9H2Y7	Q9VJL0	Q9NK53	Q86T50	Q86T43	Q86TA9	Q86T45	Q86T58	Q86T35	Q9RXM2	Q9I970	Q9I976	Q8AWC9	Q99ND1	Q8TVG6	Q8K3Y7	Q9ERG6	Q918E1	01810	Q8NFE9	Q7U945	Q9BEF4	Q8N4C3	Q8IGD3	BBAWBÖ	Q90WT9	Q9DEP9	02X08Ö
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ALIGNMENTS

; Euteleostomi; e; Homo. .; bases. C64; Length 266; Indels 19; (SKOGKLLAATILLAI SKOGKLAATILLAI SKOGKLAATILLAI SKOGKLAATILLAIT SKOGKLAATILLAI SKOGKLAATILLAITILLAITILLAITILLAI SKOGKLAATILLAITILLAITILLAITILLAITILLAITILLAITILLAITILLAITILLAITILLAITILLAITILLA	Db 121 ĠĒĠNŠSQNŚRNKRĀVQĠĎĒĒT	Oy 121 GEGNGSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE	Db 61 LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPXAGLEEAPAVTAGLKIFEPPAP		QY 1 MDDSTEREQSELTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATILLAATILLAALSCC Q/ 1 MDDSTEREQSELTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATILLAALLAGOOD AF 15 GAPS	atch 92.0%; Score 1335.5; DB 4; cal Similarity 93.3%; Pred. No. 4.2e-118;	SEQUENCE 266 AA; 29137 MW	RL Submitted (MAY-2003) to the EMBL/GenBank/JUBJ databases	"Immunobiology of Delta BAFF.";	<pre>RP SEQUENCE FROM N.A. RA Gavin A.L., Ait-Azzouzene D., Ware C.F., Nemazee D.;</pre>	[1]	Mammalia; Eutheria; Primates; Catarrhini; Hominidae;	etazoa; Chordata; Craniata; Vertebrata;		DE Delta BAFF. GN TNFSF13B.	01-OCT-2003 (TrEMBLrel. 25, Last annotation	01-OCT-2003 (TrEMBLrel. 25,	DT 01-OCT-2003 (TrEMBLrel. 25, Created)		
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RESULT 2
QBIZIA

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Best Local S
Matches 207
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Q8IZI5;
Q1-MAR-2003
01-MAR-2003
01-OCT-2003
He F., Gao H., Li R.;
Submitted (JUL-2002) to the
EMBL; AY129227; AAN08423.1;
                                                                                                                                                                                                                         01-MAR-2003 (TrEMBLrel.
01-MAR-2003 (TrEMBLrel.
01-OCT-2003 (TrEMBLrel.
B-lymphocyte stimulator
                                                                                                                                      Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gao H., He F., LI R.;

Submitted (JUL-2002) to the EMBL/GenBank/DDBJ data
EMBL; AY129226; AAN08422.1; -.

GO; GO:0016020; C:membrane; IEA.

GO; GO:0005164; F:tumor necrosis factor receptor h

GO; GO:0005155; P:immure response; IEA.

InterPro; IPR008052; Tur family.

InterPro; IPR008933; TNF_like.

PROSITE; PS50049; TNT_2; 1.
                                                                   SEQUENCE FROM N.A.
                                                                                                      NCBI_TaxID=9606;
                                                                                                                                                                                 Homo sapiens (Human)
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B-lymphocyte TNFSF13B.
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                                                                                                                                      Chordata;
Primates;
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                     to the EMBL/GenBank/DDBJ
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25, Last annotation updat
(Fragment).
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Pred. No. 5.3e
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Best Local :
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NON_TER
SEQUENCE
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InterPro; IPRO6052; TNF family.
InterPro; IPRO0893; TNF like.
PROSITE; PS50049; TNF 2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-CCT-2003 (TrEMBLrel. 25, Last annotation update)
Tumor necrosis factor (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                         MGD; MGI:1344376; Tnfsf13b.
GO; GO:0016020; C:membrane; IEA.
GO; GO:0005164; F:tumor necrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; AK034121; BAC28593.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60,770 full-length cDNAs.";
Nature 420:563-573(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the RIKEN Genome Exploration Research "Analysis of the mouse transcriptome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN=C57BL/6J; TISSUE=Diencephalon; MEDLINE=22354683; PubMed=12466851;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TNFSF13B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q8BZM8;
01-MAR-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FANTOM Consortium,
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--VTQDCLQLIADSETFTIQXGSYTFVPWLLSFXRGSALEEKENKILVKETGYFFIYGQV--
                                                                                                                                                                                  TLLLALLSCCUTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTA
                                                                  GVKLLTPAAPRPHNSSRGHRNRRAFQGPEETEQDVDLSAPPAPCLPGCRHSQHDDNGMNL
                                                                                                             GLKIFEPPAPGEGNSSQNSRNKRAVQGPEET--
                                                                                                                                                      TLLLALLSSSFTAMSLYQLAALQADLMNLRMELQSYRGSATPAAAGAPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CIQNMPETLANNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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                                                                                                                                                                                                                                                                                                                               258 AA;
                                                                                                                                                                                                                                             Conservative
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Rodentia;
                                                                                                                                                                                                                                                                                                                               28604 MW;
                                                                                                                                                                                                                                                               59.48;
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99.4%;
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..
                                                                                                                                                                                                                                                               Score 862.5;
Pred. No. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                             E6431FE93E782810 CRC64;
                                                                                                                                                                                                                                           Mismatches
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                                                                                                                                                                                                                                                               .6e-73
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                                                                                                                                                                                                                                                                                  DB 11;
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Q7TQ58;
Q1-OCT-2003
Q1-OCT-2003
Q1-OCT-2003
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Q8IZI4;
Q1-MAR-2003 (
01-MAR-2003 (
01-OCT-2003 (
B-lymphocyte)
TNFSF13B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gavin A.L., Ait-Azzouzene D., Ware C.F., Nemazee D.;
"Delta BAFF, an isoform of BAFF, regulates BAFF function.";
Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AY290823; AAR982036.1; -
SEQUENCE 290 AA; 32165 MW; BC289F9FF8187C9C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN-BALB/C
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus (Mouse)
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                            Homo sapiens (Human
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Delta BAFF.
TNFSF13B.
                             NCBI_TaxID=9606;
[1]
  SEQUENCE FROM N.A
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ilarity 60.0%;
Conservative 32
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                                                                                                                                     (Human)
                                                                                                                                                                                             stimulator
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Rodentia;
                                                                                  Chordata;
Primates;
                                                                                                                                                                                          . 23, Created)
. 23, Last sec
. 25, Last and
c (Fragment).
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                                                                                                                                                                                                                       Created)
Last sequence update)
Last annotation update)
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Pred. No. 1.7e-70;
2; Mismatches 63;
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Sciurognathi; Muridae;
                                                                                  Craniata; V
Catarrhini;
                                                                                                                                                                                                                                                                                                                                     PRT;
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                                                                                                                                                                                                                                                                                                                                     158
                                                                                     Vertebrata;
i; Hominidae;
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; Murinae; Mus
                                                                                     Euteleostomi;; Homo.
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Submitted (JUL-2002) to the EMBL/GenBank/D

EMBL; AR129228; AAN08424.1; -.

GO; GO:0016020; C:membrane; IEA.

GO; GO:0005164; F:tumor necrosis factor re

GO; GO:0006955; P:immune response; IEA.

InterPro; IPR006052; TNF family.

InterPro; IPR008983; TNF_1ike.

PROSITER 1.1

NON TER 1.1
                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (OCT-2002) to the EMBL/GenBank/DDBJ da EMBL; AF506010; AAM90951.2; -. GO; GO:0016020; C:membrane; IEA. GO; GO:0005164; F:tumor necrosis factor receptor GO; GO:0006955; P:immune response; IEA. InterPro; IPR006052; TWF family. InterPro; IPR006052; TWF_like. PROSITE; PS50049; TWF_2; 1. SEQUENCE 288 AA; 31629 MW; 8E2F291D2495BB79
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01-MAR-2003
01-OCT-2003
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Q8JHJ4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. Schneider K., Kolthow Staeheli P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; (
Archosauria; Aves; Neognathae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gallus gallus (Chicken).
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  APGEGNSSQ-----NSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFK
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(TrEMBLrel. 23, Last sequence update)
(TrEMBLrel. 25, Last annotation update)
B cell activation factor.
                                                                                                                                                                                                                                                                                                             Conservative
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Pred. No. 8e-69;
0; Mismatches
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Best Local S
Matches 85
                                                                                                                      01-MAR-2003 (TrEMBLrel. 2
01-MAR-2003 (TrEMBLrel. 2.
01-JUN-2003 (TrEMBLrel. 2.
Tumor necrosis factor.
TNFSF13B.
                                                                                                                                                                         Q8BVA3;
Q8BVA3;
01-MAR-2003
01-MAR-2003
01-JUN-2003
                                                                        Eukaryota; Metazoa;
Mammalia; Eutheria;
                   SEQUENCE
                                      NCBI_TaxID=10090;
[1]
                                                                                                                Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60,770 full-length cDNAs.";
Nature 420:53-573(2002).
EMBL; AK050384; BAC34225-1; -.
MGD; MGI:1344376; Thfsf13b.
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STRAIN=C57BL/6J; TISSUE=Liver;

MEDLINE=2334683; PubMed=12466851;

The FANTOM Consortium,

the RIKEN Genome Exploration Research

"Analysis of the mouse transcriptome I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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Rodentia;
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Last
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Pred. No. 7.2e-
22; Mismatches
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Sciurognathi; Muridae;
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Sciurognathi; Muridae;
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annotation update)
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; Murinae; Mus
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"Analysis of the mouse transcriptome based
60,770 full-length cDNAs.";
Nature 420:563-573(2002).
EMBL; ARC044387; BAC31897.1; -.
EMBL; ARC044387; BAC31897.1; -.
PIR; PT0714; PT0714
GO; GO:00016020; C:membrane; IEA.
GO; GO:00016020; C:membrane; IEA.
GO; GO:0001695; P:immune response; IEA.
InterPro; IPR008983; TNF family.
InterPro; IPR008983; TNF ike.
SMART: SM00207: TNF: 2.
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Best Local Similarity
                                                                                                                                                                                   PROSITE; PS00251; TNF 1; 1.
PROSITE; PS50049; TNF 2; 2.
SEQUENCE 410 AA; 45881 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=C57BL/6J; TISSUE=Retina; MEDLINE=22354683; PubMed=12466851; The FANTOM Consortium,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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01-MAR-2003 (TrEMBLrel. 23,
01-OCT-2003 (TrEMBLrel. 25,
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MEDLINE=22554683; PubMed=12466851;
The FANTOM Consortium,
the RIKEN Genome Exploration Research Group Phase I & II Team;
"Analysis of the mouse transcriptome based on functional annotation 60,770 full-length cDNAs.";
80,770 full-length cDNAs.";
Nature 420.563-573(2002).
                                                                                                                                                                                                                                                              SMART;
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-SRLQRSGGPSQKQGERPWQSLWEQSPDVLEAWK-
                                                                                            Pred. No. 9.56
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Matches 70
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Harada M., Horiuchi T.;
Genomic structure of APRIL, a proliferation-inducing ligar
Submitted (MAY-2002) to the EMBL/GenBank/DDBJ databases.
R EMBL; AF513501; AAM47279.1; -.
R GG; GO:0016020; C:membrane; IEA.
R GG; GO:0005164; F:tumor necrosis factor receptor binding; i
R GG; GO:0005164; F:tumor recrosis factor receptor binding; i
R GG; GO:0005055; P:immune response; IEA.
R GG; GO:0006955; P:immune response; IEA.
R InterPro; IPR006052; TNF_family.
R InterPro; IPR006052; TNF_family.
R Ffam; PF00229; TNF; 1.
R Pfam; PF00229; TNF; 1.
                    Q81ZK7;
Q81ZK7;
01-MAR-2003
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TWE-PRIL:
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01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last seq
01-OCT-2003 (TrEMBLrel. 25, Last ann
proliferation-inducing ligand APRIL.
Homo sapiens (Human)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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PS50049; TNF_2; 1.
250 AA; 27453 MW;
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                                                (Tremburel. (Tremburel. (Tremburel. (Tremburel.
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Pred. No. 9e-15;
                                                                                                                                                 PRT;
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Best Local S
Matches 73
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EMBO J. 21:5711-5720(2002).

EMBL, AV061051; AAL90443.1; -..

GO; GO:0016020; C:membrane; IEA.

GO; GO:0005164; F:tumor necrosis fac

GO; GO:0006955; P:immune response; II

InterPro; IPR006952; TNF_family.

InterPro; IPR008983; TNF_like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pfam; PF00229; TNF; 1.
SMART; SM00207; TNF; 1.
PROSITE; PS00251; TNF 1; 1.
PROSITE; PS50049; TNF 2; 2.
SEQUENCE 330 AA; 36588 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE=22299924; PubMed=12411489;
Pradet-Balade B., Medema J.P., Lopez-Fraga |
Kolfschoten G.M., Picard A., Martinez-A C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=9606;
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Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                               Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neopbera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
NCBI_TaxID=7227;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "An endogenous hybrid mRNA encodes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGVYLLYSQVLFQDVIFIMGQVVSRB-----GQGRQETLFRCIRSMP-SHPDRAYNSCY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETLPN---NSCY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAQAGVDGTVSGWEEARINSSSPLRYNRQIGEFIVTRAGLYYLYCQSSDALEAWENGERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SAGVFHLHQGDILSVIIPRARAKLNLSPHGTFLGFVKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RKRRAVLTQKQKKQHSVLHLVPINAT-SKDDSDVTEVMWQPALRRGRGLQAQGYGVRIQD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chordata; Craniata; Vertebrata; F
Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16.2%; Score 235.5;
26.3%; Pred. No. 9.5e
tive 45; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     222
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Last sequence Last anno
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se; IEA.
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annotation update)
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J.A.,
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SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
SEQUENCE FROM N., Brokstein P., Hong L., Agbayani A., Carlson U.,
Stapleton M., Brokstein P., Hong L., Agbayani A., Carlson U.,
Stapleton M., Chavez C., Dorsett V., Dresnek D., Farfan D., Frise E.,
Champe M., Chavez C., Cuarin H., Kronmiller B., Li P., Liao G.,
George R., Gonzalez M., Guarin H., Kronmiller B., Li P., Liao G.,
Miranda A., Mungall C.J., Nunco J., Pacleb J., Paragas V., Park S.,
Miranda A., Mungall C.J., Nunco J., Pacleb J., Paragas V., Park S.,
Darel S., Phouanenavong S., Wan K., Yu C., Lewis S.E., Rubin G.M.,

Patel S., Phouanenavony Celniker S.;
Submitted (JUN-2002) to the EMBL/GenBank/DDBJ
Submitted (JUN-2003) 1; -.

databases

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RESULT 14
Q9V5G2
IDV5G2
IDV5G2
IDV5G2
ID 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MA
DT 01-MCBI
RN CBL29
GN CEDHyd
OC EDHyd
OC EDHyd
OC EDHyd
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OC EDHyd
RN CBI
RN [1]
RN SEQUE
RC STRAL
RA MEDLJ
RA Adams
RA Abri
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RA Bees
RA Bean
RA Hari
RA Glod
RA Hari
RA Hari
RA Hari
RA Hasi
RA Kimm
RA Liu
RC STRAIN-Berkeley;
RX MEDLINE-2019606; PubMed=10731132;
RA Adams M.D., Celniker S.E., Holt R.A., Hoskins R.A., Galle R.F.,
RA Adams M.D., Celniker S.E., Ki P.W., Hoskins R.A., Galle R.F.,
RA Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Ballew R.M., Basu A., Baxeria R.G., Champe M., Pfeiffer B.D.,
RA Abril U.F., Asbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brottier P.,
RA Burtis K.C., Busam D.A., Buller H., Cadieu E., Center A., Chandra I.,
RA Ghory J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Dodson K., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwam C.,
RA Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,
RA Liako P., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X.,
RA Liako P., Lei Y., Levitsky A.A., Li J., Li Z., McPherson D.,
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Best Local
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Q9V5G2;
01-MAY-2000
01-MAY-2000
01-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=7227;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ephydroidea; Drosophilidae; Drosophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS00251; TNF 1; 1. PROSITE; PS50049; TNF 2; 1. SEQUENCE 261 AA; 29780 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FlyBase; FBgn0033483; eiger.
GO; GO:0016020; C:membrane; IEA.
GO; GO:0005164; F:tumor necrosis factor receptor binding; IEA.
GO; GO:0005164; F:tumor necrosis; IEA.
InterPro; IPR008983; TNF family.
InterPro; IPR008983; TNF like.
SMART; SM00207; TNF; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0 (TrEMBLrel. 13, 0 (TrEMBLrel. 13, 13 (TrEMBLrel. 25, 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 109;
Pred. No. 0.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ---DSRPAAHFHLSSRRRHQGSMGYHGDMYIGNDN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           325
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RESULT: 15
Q8MUJ1
                             PRESENTATION OF THE PRESEN
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RA Mount S.M., Moy M., Murphy B., Murphy L., Muzny D.M., Nelson D.L.,
RA Nelson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
RA Palazzolo M.; Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G.,
RA Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H.,
RA Spier E., Syradling A.C., Stapleton M., Skupski M.P., Smith T.,
RA Syier E., Syradling A.C., Stapleton M., Skupski M.P., Smith T.,
RA Wang Z.-Y., Wassarman D.A., Weinstock G.M., Weissenbach J.,
Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,
RA Ye J., Yeh R.-F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zheng L.,
RA Zheng X.H., Zhong F.N., Zhong W., Zhu S., Zhu X., Smith H.O.,
RA Zheng X.H., Zhong F.N., Zhong W., Zhu S., Zhu X., Smith H.O.,
RA Gibbs R.A., Wyers E.W., Rubin G.M., Venter J.C.;
RT "The genome sequence of Drosophila melanogaster.";
DR EMBL, AE003831, AAF58848.1.
DR GO; GO:0005164; F:tumor necrosis factor receptor binding; IEA.
DR GO; GO:0005955; P:immune response; IEA.
DR GO; GO:0005955; P:immune response; IEA.
DR GO; GO:0005953; TNF family.
DR InterPro; IPR00893; TNF like.
DR SMATT; SM00207; TNF; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q8MUJ1;
01-OCT-2002
01-OCT-2002
01-OCT-2003
[2]
SEQUENCE FROM N.A.
MEDLINE=22775938; PubMed=12894227;
Medline=22775938; PubMed=12894227;
                                                                                                                                                                                                                                                                                                                                                   Eiger (DARTH).

EIGER OR CG12919 OR DARTH.

Drosophila melanogaster (Fruit fly).

Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygo
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE;
PROSITE;
SEQUENCE
                                                                                                                             Moreno E., Yan M., Basler K.;
"Evolution of TNF Signaling Mechanisms.
Triggered by Biger, the Drosophila Homo
Curr. Biol. 12:1263-1268(2002).
                                                                                                                                                                                                                                         SEQUENCE FROM N.A. MEDLINE=22165923; PubMed=12176339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Trnw80
                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=7227;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     217
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PS50049; TNF_2; 1.
325 AA; 36862 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LQCLNTVPTNMPHKVHTCHTSGLIHLERNERIHLKDIHNDRNAVLREGNNRSYFGIFKV. 325
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25,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Created)
Last sequence update)
Last annotation update)
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Pred. No. 0.09
14; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6E5CCB69694F1A3A CRC64;
                       Tomar
                                                                                                                                                          Homolog
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                       R.S.,
                                                                                                                                                             JNK-Dependent
log of the TNF
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                       Eby M.T.,
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Melson D.L.,
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                                                                                                                                                          Apoptosis
Superfamily.";
                       Chapo
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Search completed: August 25, 2004, 14:42:17 Job time: 84.9697 secs
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Chaudhary P.M.;
Chaudhary P.M.;
T "Eiger and its receptor, Wengen, comprise a TNF-like system in
Drosophila.";
Oncogene 22:4860-4867(2003).
R EMBL; A7115551; AAM66763.1; -.
R FlyBase; FBgn003483; eiger.
R FlyBase; FBgn003483; eiger.
R GO; GO:0016020; C:membrane; IEA.
R GO; GO:0005164; F:tumor necrosis factor receptor binding; IEA.
R GO; GO:0005164; F:tumor response; IEA.
R GO; GO:0006955; P:immune response; IEA.
R InterPro; IPR006052; TNF Tamily.
R InterPro; IPR006052; TNF Tamily.
R SMART; SM00207; TNF 1; 1.
R PROSITE; PS00251; TNF 2; 1.
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                                                                                                                                                  230 FRCIQNMPETLPN--NSCYSAGIAKLEEGDELQLAIPR--ENAQISLDGDVTFFGALKL 284
                                                                                                                                                                                                  307 ERNSYQGHFQTRDGVLTVTNTGLYYVYAQTCYNNSHDQNGFTVFQ-----GD----TPF 356
                                                                                                                                                                                                                                                                                                                                                                                                           213 IADVRNBEQNIQCNHTE-------LQEKSSNEATSK--ESPAPLHHRRRMHSRHR 258
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Result
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[Maximum Match 100%
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Aau12183 Human PRO
Aae07156 Human TNG
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  The present polypeptide identifying
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                                                   Page 18; 23pp;
                                                                             r necrosis factor homologue, 'of Alzheimer's disease, AIDS
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Matches 285
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     diagnosis; antigen-specific proliferation; cytokine production; immune response; autoimmune disorder; rheumatoid arthritis; systemic lupus erythematosis; Hashimoto's autoimmune thyroiditi
                                  WPI; 1998-362719/31.
N-PSDB; AAV39985.
                                                                                                                                                                                                                                                                                                     16-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
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Pred. No. 1.3e-144;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mouse;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence is a human T cell surface antigen, designated 6395 The novel protein designated 63954 is expressed on T cells. Protein 638 can modulate antigen specific proliferation and cytokine production on effector cells and may potentiate inmune cell expansion or apoptosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New isolated polypeptide, 63954 - used to develop products for treating e.g. autoimmune disorders, inflammation, tissue rejection, cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Page 60-61; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                degenerative conditions.
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                                                                                KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL 240
                                                                                                                                    GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
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                                                                                                                                                                                                                         LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL 285
                                                   KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sequence is a human T cell surface antigen, designated 63954 rotein designated 63954 is expressed on T cells. Protein 63954
                                                                                                                                                                                                                                                                                                                                                                                          100.0%; llarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   drug screening
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                                                                                                                                                                                                                                                                                                                                                                                          Score 1451; DB 2;
Pred. No. 1.3e-144;
Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                      neutrokine alpha; cell proliferation; differentiation; migration; cytotoxicity; cell death; treatment; tumour; infection; inflammation; wound healing; immunodeficiency; autoimmune disease; graft rejection; fibrotic disorder; haematopoiesis; sepsis; shock; malaria; HTV; AIDS; acquired immune deficiency syndrome; rheumatoid arthritis; silicosis;
                                                                Key
Domain
                                                                                                                                                                                                                                                                                                                                                                                                                         acquired
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens neutrokine alpha protein.
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                                                                                                                                                                                                                                                      Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                  detection;
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                                                                                                                                                                                                                                                                                                                                                                           deficiency syndrome;
ion; diagnosis; drug
                                                                                                                           Location/Qualifiers
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            "intracellular
                                                                                                                                                                                                                                                                                                                                                                                  screening
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PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL

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                                                                                                                                                                                                      The sequence is that of the neutrokine alpha protein. Neutrokine alpha (NA) polypeptides modulate cell proliferation, differentiation, cytotoxicity and cell death. They can be used to treat e.g. migration, cytotoxicity and cell death. They can be used to treat e.g. common and tumour metastasis, infections by bacteria, viruses and other common and proliferation, and inflammatory diseases, lymphadenopathy, comparative, immunodeficiencies, inflammatory diseases, lymphadenopathy, can entire tolerance, destroy some transformed cell lines, mediate cell activation and proliferation, and are functionally linked as primary continually linked as primary can explain the regulation and inflammatory responses. Such activity is useful for immune regulation and inflammatory responses. Such activity cell mediators of immune regulation and inflammatory responses. Such activity of leukaemia, They can also be used to stimulate wound healing and to regulating the activation and differentiation of various haematopoietic, treat fibrosis. They can also be used to regulate heamatopoietic, cell progenitor cells, e.g. to release mature leukocytes from the bone marrow control and treat sepsis. NA antagonists can be used to prevent septic shock, cell inflammation, cerebral malaria, activation of the HIV virus, graft-host cell control control and propertion, rheumatoid arthritis and cachexia (wasting or malnutrition). They can also be used to treat e.g. autoimmune diseases such as salicosis, and sarcoidosis, inflammatory and infectious diseases such as salicosis, and sarcoidosis, candidated allergic reactions, mediated allergic reactions, mediated allergic reactions, and sarcoidosis, histamine-mediated allergic reactions, control control control of the malaria, and acoptic dermaticis by inhibiting chemokine-induced mediated allergic reactions, subspithelial basement membrane fibrosis or calcilor, disposes, rheumatoid arthritis, inflammation, cell detection, disposes, rheumatoid arthritis, inflammatory, and disposes, rheumatoid arthritis an
                                                                                                                              Query Match
Best Local S
Matches 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New isolated human Neutrokine alpha - used to develop products for diagnosis and treatment of e.g. tumours, infections, immunodeficiencies
                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 17; Fig 1; 104pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            diagnosis and treatment of e.g. tumours, or autoimmune diseases.
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LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAFKAGLEEAPAVTAGLKIFEPPAP
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/note= "transmembrane
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                                                                                                                            Gaps
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This sequence is the tumour necrosis factor (TNF) ligand family protein co of the invention, designated TNFL1. The TNFL proteins play regulatory croles in cell proliferation and/or differentiation, e.g. they can induce production of cytokines, immunoglobulins, etc. A variety of diseases can clearly by modulating the activity of TNFL proteins, e.g. they can conduct apoptosis of activated T cells but rescue resting T cell from capoptosis. TNFL polypeptides can therefore be used to treat autoimmune cromours, such as myasthenia gravis, insulin-dependent diabetes mellitus, cromours can be treated by inhibiting the expression or activity of TNFL. Other proliferative disorders, such as neoplasias, and systemic lugus can be treated by inhibiting the expression or activity of TNFL. Characteristics and polympuleotides can also be used to enhance or decrease TNF activity, thus providing therapeutic benefits such as induction of
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                                                                                                                                                                                                                                                                                Claim 1; Page 61; 69pp;
                                                                                                                                                                                                                                                                                                                                  New tumor necrosis factor ligands, useful for induction
                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-405508/34.
                                                                                                                                                                                                                                                                                                                                                                                                                         Tribouley C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-DEC-1997;
16-DEC-1998;
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98US-00212270
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Matches 285
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                                         New Tumor Necrosis Factor family receptor polypeptides and ligands - useful for diagnosis and treatment of prostate cancer and developmental or gestational abnormalities.
                                                                                                                                                                                                                                                                                                                                                          Tumour necrosis factor receptor; signal transducer molecule; TNF; APO4; developmental abnormality; gestational abnormality; prostate cancer? APO6; APO8; APO9; TNRL-1; TNRL-3; diagnosis; treatment; therapy; disease; cytoplasmic domain; immunogen; antibody preparation; breast carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Human TNRL1-alpha protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW93586 standard;
                                                                                                                                           Chaudhary PM,
                                                                                                                                                                                                    05-SEP-1997;
                                                                                                                                                                                                                               04-SEP-1998;
                                                                                                                                                                                                                                                            11-MAR-1999.
                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                              apoptosis; human; TNRL1-alpha.
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                Claim 34; Fig
                                                                                                                                                                        (UNIW ) UNIV WASHINGTON
                                                                                                    1999-205191/17.
DB; AAX23420.
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Pred. No. 1.3e-144;
; Mismatches 0;
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CC This invention describes isolated Tumor Necrosis Factor (TNF) family CC receptor polypeptides: APO4, APO6, APO8 and APO9 or their active fragments, and isolated TNF related ligands 1 and 3 (TNRL1 and TNRL3) or CC their active fragments. APO4 is useful for disagnosing prostate cancer by CC determining levels of APO4 in an individual. Prostate cancer can also be CC treated using APO4 selective binding agents linked to a therapeutic comolety. APO4 polypeptides are also useful for identifying selective binding agents, useful in diagnosis/treatment of disease by binding of CC agents to the polypeptides are also useful for identifying selective captessed on the cell surface. The binding is preferably performed in CC vivo. APO4 polypeptides/active fragments are also useful for screening CC or agenists and antagonists by binding and observing the changer in APO4 activity. Effective pharmacological agents useful in diagnosis or treatment of disease are also identified using APO4 polypeptides/active companies and APO4 signal transducer molecules that specifically interact CC with a cytoplasmic domain of APO4 and detecting a change in level of APO4 activity. The method is performed in vivo or in vitro. APO polypeptides are all useful as immunogens for preparing antibodies. APO4 is also cuseful for diagnosis/treatment of developmental or gestational cC abnormalities. APO8 was transfected to human breast carcinoma cell line MCF-7, and induced apoptosis
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밁 á á В Ś 뮍 8 B Š Query Match Best Local S Matches 285 Local Similarity hes 285; Conserv 181 181 121 121 241 61 61 -۲ LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEBAPAVTAGLKIFEPPAP GEGNSSONSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC MDDSTEREQSRLTSCLXKREEMKLKECVSILPRKESPSVRSSKDGKLLAATILLALLSCC PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL GEGNSSONSRNKRAVOGPEETVTODCLOLIADSETPTIOKGSYTFVPWLLSFKRGSALEE KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL 100.0%; Score 1451; DB 2; ilarity 100.0%; Pred. No. 1.3e-144; Conservative 0; Mismatches 0; Length Indels 0; 180 120 240 240 180 120 60 60 0

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RESULT 6
AAY04392
ID AAY04392 standard; protein; 285 AA.

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AC AAY04392;
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CA AAY04392;
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RESULT 7
AAB0659
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Best Local (
                                                                                                                                                                                                      immunodeficiency; inflammatory disease; lymphadenopathy; dermatitis; autoimmune disease; graft versus host disease; immune regulation; severe combined immunodeficiency-X-linked agammaglobulinemia; kappa chain deficiency; B cell lymphoproliferative disorder; purpura; wiskott-Aldrich syndrome; systemic lupus erhythematosus; myocarditis; diopathic thrombocytopenia purpura; hemolytic anemia; neuritis; allergic encephalomyelitis; relapsing polychondritis; glomerulonephritis; rheumatic heart disease; multiple sclerosis; uveitis opthalmia; polyendocrinopathy; Reiter's disease; autoimmune pulmonary inflammation;
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N-PSDB; AAX333330.
                                                                                                                       Homo sapiens
                                                                                                                                                                                   myeloprotection;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           neutrokine-alpha; tumor; tumor metastasis; infection;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence of a human neutrokine-alpha polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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1. .46
/note= "intracellular domain"
                                                           Location/Qualifiers
                                                                                                                                                                                stem cell mobilization; leukemia.
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Pred. No. 1.3e-144;
; Mismatches 0;
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MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC

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The present sequence represents a human neutrokine-alpha polypeptide. CC Neutrokine-alpha polypeptides are used to treat, prevent, prognose and CC diagnose tumor and tumor metastasis, infections by bacteria, viruses and CC other parasites, immunodeficiencies, inflammatory diseases, to mediate immune regulation and inflammatory responses. Diseases which may be treated include severe combined immunodeficiency (SCID)-X-linked CC agammaglobulinemia, kappa chain deficiency, B cell lymphoproliferative CC disorder (BLPD), Wiskott-Aldrich syndrome, systemic lupus erhythematosus, cidiopathic thrombocytopenia purpura, hemolytic anemia, dermatitis, CC rheumatic heart disease, glomerulonephritis, relapsing polychondritis, CC respective of the compania polychomerulonephritis, Telapsing polychondricis, CC resuperia purpura, Reiter's Disease, and Autoimmune Pulmonary CC suppression, myeloprotection, stem cell mobilization, acute and chronic confilammatory control and treatment of leukemia
            Query Match
Best Local Similarity
  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-APR-1999;
28-MAY-1999;
06-JUL-1999;
07-JUL-1999;
24-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel
SV pol
                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-DEC-1999;
16-DEC-1999;
23-DEC-1999;
14-JAN-2000;
                                                                                                                                                                                                                                                                                                                  Novel cytokine neutrokine-alpha, its splicing variant, neutrokine-alpha SV polypeptides useful for treating tumor, tumor metastasis, microbial infections, immunodeficiency, inflammatory diseases, lymphoadenopathy.
                                                Sequence
                                                                                                                                                                                                                                                                                            Claim
                                                                                                                                                                                                                                                                                                                                                                                                     Rosen
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DB; AAA64427.
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 Conservative
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99US-0136784P.
99US-0142659P.
99US-0145824P.
99US-0167239P.
99US-0171108P.
99US-01711626P.
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99US-0130412P.
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/note= "transmembrane
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              .0%;
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Score 1451;
Pred. No. 1.3
); Mismatches
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            DB 3;
.3e-144;
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                                                                                                                                                                                                                                                                                                                                                                          N-PSDB;
                                                                                                                                                                                                                                                                          Novel polypeptides comprising proteins, useful for treating rheumatoid arthritis.
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type II transmembrane protein; B cell stimulatory factor;
inflammatory disorder; immune disorder; rheumatoid arthritis;
lupus and graft versus host disease.
The present sequence represents a human AGP-3 polypeptide. AGP-3 is a tumour necrosis factor (TNP) ligand family member. AGP-3 is a type II transmembrane protein, and is a potent B cell stimulatory factor. Expression of AGP-3 correlates to increases in the number of B cells and immunoglobulins produced. AGP-3 proteins, antibodies, and nucleic acids may be used to treat inflammatory and immune disorders, e.g. rheumatoid arthritis, Crohn's disease, lupus and graft versus host disease. The nucleic acids may be used to regulate the expression of an AGP-3 related
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18-NOV-1999;
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)B; AAA63941.
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73. .28
/note=
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                                                                                                                                                                                                                                                                                                        tumor necrosis factor ligand family
inflammatory and immune disorders,
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Claim

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77pp;

Tumor necrosis factor (TNF) and TNF receptor superfamily TNF-L and TNFR-L, useful for enhancing or decreasing TNF as inducing cell death and lymphoid organogenesis.

protein members activities such

for and

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RESULT 9
AAB28553
IID AAB28553
AC AAB2553
AC AAB2
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DT 08-F
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; tumour necrosis factor like-1; TNFL1; tumour necrosis factor; TNF; immunosuppressive; antiarthritic; neuroprotective; dermatalogical; antiinflammatory; antidiabetic; cytostatic; osteopathic; gene therapy; colon cancer; rheumatoid arthritis; septic shock; Crohn's disease; osteopporosis; autoimmune disease; myasthenia gravis; insulin-dependent diabetes mellitus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein. The AGP-3 proteins, antibodies and nucleic ands are also unfor the detection of AGP-3 agonists, antagonists and characterizing interactions with AGP-3 related proteins. note: this sequence is not specifically claimed. It is only mentioned in the claims, in that a polypeptide that does not comprise the present sequence is claimed
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N-PSDB; AAC63756.
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Pred. No. 1.3e-144;
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RESULT 10
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Best Local S
Matches 285
                                                                                                               nuclear factor-kB; c-jun N-terminal kinase; shock; acute phase response; viral infection; radiation susceptibility; atherosclerosis; cancer; acute inflammatory condition; arthritis; allergy;
                                                          Homo sapiens
                                                                                                                                                                              Human;
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                                                                                                                                                                                                                                                           04-DEC-2000
                                                                                                                                                                                                                                                                                                                                       AAB08191 standard;
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Conservative
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Location/Qualifiers
1. .46
                                                                                                                                                                            THANK; tumour necrosis factor homologue;
                                                                                                reaction;
                                                                                                                                                                                                                                                                                                                                     protein;
                                                                                                                                                                                                             of human cytokine designated
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.0%; Pred. No. 1.3e-144;
0; Mismatches 0;
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Domain

RESULT 11
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ID AAE09
XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         pathological co
factor homolog
                                                                                                                                                                                                                                                                                                                                       Sequence 285
                                                                                                                                                                                                                                                                                                                                                                 myeloid leukemic cells
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Inhibiting the activation of nuclear factor-kB in cells for treating pathological conditions comprises treating cells with a tumor necrosis
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PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                       KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                                             GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                                               GEGNSSQNSRNKRÅVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
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                                                      KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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                                                                                                                                                                                             LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
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e= "extracellular domain'
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Pred. No. 1.3e-144;
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Inhibiting or neutralizing TALL-1 or APRIL polypeptide biological activity, for treating autoimmune disorders and cancer, comprises exposing the cells to TALL-1 or APRIL polypeptide agonists or antagonists:
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N-PSDB; AADI5903.
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22-AUG-2000; 2000US-0226986P.
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                             PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                            KENKILVKETGYFF1YGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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Pred. No. 1.3e-144;
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Baker KP, Gerritsen Smith V,

Beresini M, ME, Goddard Stewart TA,

I A, Godov Tumas D,

Deforge L, Desnoyers L, 1, Godowski ÞJ, Gurney Tumas D, Watanabe CK, W

Wood WI,

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WPI; 2001-408281 N-PSDB; AAS21255

2001-408281/43

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05-JAN-2000;
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11-FEB-2000;
18-FEB-2000;
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16-DEC-1999;
20-DEC-1999;
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2000WG-US013705
2000WG-US014042
2000WG-US014941
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2000WO-US022031.
2000WO-US023522.
2000WO-US023352.
2000WO-US030952.
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Matches
                                                                                                                                               Human; tumour necrosis factor; TNP-delta; gene therapy; antirheumatic; apoptosis; rheumatoid arthritis; cytostatic; sepsis; anti-inflammatory; inflammatory bowel disease; immunosuppressive; antiarthritic; tumour;
      US2001010925-A1
                                                                 Homo sapiens
                                                                                                                            antibacterial;
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Best Local S
Matches 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present sequence is human tumor necrosis factor (TNF)-delta protein. The TNF-delta polynucleotide is useful in gene therapy for modulating TNI-delta. TNF-delta is useful for treating deficiencies of TNF-delta and diseases ameliorated by TNF-delta. TNF-delta is also useful for screening, diagnosing, prognosing, staging or monitoring conditions or diseases attributable to TNF-delta, e.g. inflammatory bowel disease, sepsis or rheumatoid arthritis). The TNF-delta is also useful as an anti-cancer agent to induce apoptosis in cancer and tumour-associated cells
                                                                                                                                                                    AAY71978
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Human; Tumour Necrosis Factor; TNF; immunosuppressant; TALL-1; Tumour necrosis factor and Apol-related Leucovyte expressed Lidand 1; therapy; autoimmune disorder; rheumatoid arthritis; multiple sclerosis; systemic lupus erythematosus; SLE; insulin dependent diabetes mellitus; thrombocytopenia purpura; acute rheumatic fever; Goodpasture's syndrome haemolytic anaemia; Grave's disease; myasthenia gravis; BCMA;

28-MAR-2001 AAY71978;

(first

entry)

ApoL-related

Leucocyte-expressed Ligand

1 (TALL-1)

protein.

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cc proteins (including homologues), and their antibodies. The invention in cc particular relates to methods for regulating the interaction between TALL 1 and TALL-1 receptors (BCMA referred as B cell maturation factor) to cc regulate monocyte, macrophage and B lymphocyte mediated immune responses. TALL-1 protein is useful for identifying compounds that regulate B cc lymphocyte proliferation. It is also useful for treating B lymphocyte associated autoimmune disorders like rheumatoid arthritis, systemic lupus crythematosus (SLE), insulin dependent diabetes mellitus, multiple sclerosis, myssthenia gravis, Grave's disease, autoimmune haemolytic anaemia, autoimmune thrombocytopenia purpura, Goodpasture's syndrome, cc pemphigus vulgaris, acute rheumatic fever, post-streptococcal glomerulonephritis, or polyarteritis nodosa. The TALL-1 protein and its corresponding nucleic acid sequence are also useful in diagnostic assays. The present sequence is human Tumour necrosis factor (TNF) and Apol-cc related Leucocyte-expressed Ligand 1 (TALL-1) protein expressed by
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01-MAY-2000;
                                                                                                                                                                                                                                                                                                                              The present invention relates to Tumour necrosis factor (TNF) and Apolrelated Leucocyte expressed Ligand 1 (TALL-1) nucleic acid molecules, proteins (including homologues), and their antibodies. The invention in
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N-PSDB; AAD02122.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 2a; Fig la; 112pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Isolated TALL-1 protein is used to identify compounds that regulate lymphocyte proliferation, used to treat B lymphocyte associated autoimmune disorders.
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277. .28
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217. .22
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                                                                                                                                                                                                                                                                                                                 Human; transmembrane activator and CAML interactor; TACI; tumour necrosis factor receptor; TNF; autoimmune disease; diabetes; calcium-signal modulating cyclophilin ligand; CAML; viral infection; neutrokine alpha polypeptide; TACI-Ligand; TACI-L; cytostatic; therapy; neuroprotective; antidiabetic; antiviral; antinflammatory; tumour; antiarthritic; antirheumatic; immunosuppressive; multiple sclerosis; rheumatoid arthritis; graft rejection; inflammation; cell proliferation; cell death; immunoglobulin E-mediated allergic reaction; IgE.
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is a type
                                                                                                                                                                                                                                                                                                                                                                                                                                     Human TACI-ligand (TACI-L)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                   09-NOV-2000
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                                                9905-00302863
                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                       'label= Extracellular_domain
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Pred. No. 1.3e-144;
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Human; tumour necrosis factor; TNF; APBF; APRIL; BAFF; therapy; melanoma; immune system related disorder; cancer; renal cell; breast; stomach; rectal; colon; throat; bladder; ovarian carcinoma; cellular disorder; gastrointestinal; scleroderma; Kaposi's sarcoma; chronic leukaemia; squamous cell carcinoma; hyperproliferative condition; pannus formation; rheumatoid arthritis; postsurgical scarring; fibrosis; liver; uterine; lung; immunodeficiency; inflammatory disease; lymphadenopathy; vulnerary; autoimmune disease; graft versus host disease; dermatological;
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Pred. No. 1.3e-144;
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KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL

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LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP

MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC

MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC

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120 120

GEGNSSONSRNKRAVOGPEETVTODCLOLIADSETPTIOKGSYTFVPWLLSFKRGSALEE

GEGNSSONSRNKRAVOGPEETVTODCLOLIADSETPTIOKGSYTFVPWLLSFKRGSALEE

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240 240 Best Loc Matches

285;

Conservative

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Gaps

Local

Similarity

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The present invention relates to an isolated heteromeric ligand of tumour CC necrosis factor (TNF) family, referred to as APBF comprising a TNF-family CC member APRIL subunit linked non-covalently to TNF-family member BAFF CC subunit. APBF is useful for diagnosis or treatment of various immune CC include cancer, including cellular disorders, for e.g. renal cell cancer, CC Kaposi's sarcoma, chronic leukaemia, breast cancer, sarcoma, cvarian CC cancer, squamous cell carcinoma and gastrointestinal or stomach cancer, bladder CC cancer, squamous cell carcinoma and gastrointestinal or stomach cancer, CC cellular hyperproliferative conditions, such as scleroderma, pannus CC condition in rheumatoid arthritis, postsurgical scarring and lung, liver and uterine fibrosis and immunodeficiencies, inflammatory diseases. APBF CC lymphademopathy, autoimmune diseases and graft versus host disease. APBF CS is also useful for producing monoclonal or polyvlonal antibodies and for identifying novel modulators affecting biological function and receptors conternating with APBF. The present sequence is human BAFF protein
                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
Domain
                                                                                                                                                                                                                                                                                                                                                                                                                diagnosis, treatment of immune syscomprises TNF-family member APRIL family member BAFF subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antiinflammatory; immunosuppressive; cytostatic
                                                                                                                                                                                                                                                                                                                                                                                    Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New heteromeric ligand
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               100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                  l of tumor necrosis factor (TNF) family, useful

of immune system-related disorders in humans,

nember APRIL subunit linked non-covalently to TN
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Score 1451;
Pred. No. 1.3
); Mismatches
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PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL 285

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RESULT 17
AAB24636
ID AAB244636
AC AAB24
XX AAC AAB24
XX 22-OC
XX 22-OC
XX US200
DT 12-OC
XX US200
DY Humar
KW Homo
YX US200
YX US200
YX US200
YX New the Homo
YX WPI
FIT Agoni
YX New The John Hold
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                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 285;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to tumor necrosis factor (TNF)-delta protein and its corresponding nucleic acid. TNF-delta is used for detecting the presence of a target TNF-delta polynucleotide, such as mRNA, in a sample. A compound which induces activation of TNF-delta is used to treat a patient having a need to induce inactivation of TNF-delta. It is also used to determine whether a compound is an agomist or antagonist of a TNF-delta protein. A TNF-delta ligand is used to detect whether a receptor binds to the ligand. An antibody to TNF-delta is used to detect TNF-delta antigen in a test sample. Inhibiting TNF-delta can be used to treat inflammation. TNF-delta can be used as an adjunct with anti-cancer chemotherapy agents for the treatment of tumours. TNF-delta DNA is used in gene therapy. The present sequence is human TNF-delta protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   agonists,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New tumor necrosis factor (TNF)-delta polypeptide for detecting TNF-delta agonists, antagonists and antibodies and for treating cancer and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-489327/52.
N-PSDB; AAD39318.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                  LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                                                                                                                                                                                      MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                                                                                                                                                                                                                                                                                                                             MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      285 AA;
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KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                             GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                 GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                                                  LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 1451; DB 5;
100.0%; Pred. No. 1.3e-144;
                                                                                                                                                                                                                                                                                                                                                                                                                 0;
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Query Match Best Local Similarity Matches 285; Conserv

Conservative

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RESULT 18
ABB90325
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                                                                                                   The invention relates to novel genes (ABL8944-ABL90853) and proteins (ABB89040-ABB90444) useful for preventing, treating or ameliorating CC medical conditions e.g. by protein or gene therapy. The genes are CC isolated from a range of human tissues disclosed in the specification. CC the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and CC ovarian cancer and other cancers of the adrenal gland, bone, bone marrow, CC breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune CC disorders e.g. Addison's disease, allergies, autoimmune haemolytic CC anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c) cardiovascular disorders such as myocardial ischaemias; (d) wound healing (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f) confections. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly crom wife at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral; antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer; vulnerary; anticonvulsant; antibacterial; antifungal; antiparastic; cardiant; gene therapy; cancer; immune disorder; cardiovascular disorde neurological disease; infection; human; secreted protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel 1405 isolated polypeptides, useful for diagnosis, treatment prevention of neural, immune system, muscular, reproductive, gastrointestinal, pulmonary, cardiovascular, renal and proliferati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N-PSDB;
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                                                                         Sequence 285 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 11; SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            disorders
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-MAY-2001; 2001WO-US016450
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2002-122018/16.
)B; ABL90734.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rosen CA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ID NO 2701; 2081pp + Sequence Listing; English
100.0%; Score 1451; DB 5; 100.0%; Pred. No. 1.3e-144; tive 0; Mismatches 0;
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RESULT 19
ABB84465
ID B84465
AC ABB84
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25-JUL-2000;

28-JUL-2000;

02-AUG-2000;

17-AUG-2000;

23-AUG-2000;

07-SEP-2000;

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18-SEP-2000;

18-SEP-2000;

18-SEP-2000;

24-CCT-2000;

24-CCT-2000;

20-NOV-2000;

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20-JUL-2000;
25-JUL-2000;
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2000US-0219556P.
2000US-0220624P.
2000US-0220664P.
2000US-022664P.
2000US-022695P.
; 2000US-00643657.
2000WO-US023322.
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2000US-023978P.
; 2000US-023978P.
2000WO-US030952

2000WO-US030873

2000WO-US032678

2000WS-US032759

2000WS-00767609

2001WS-00767609

2001WS-00767699

2001WS-00767699

2001WS-0086520

2001WS-00806666

2001WS-00808699

2001US-0080869444
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10-MAY-2001;
10-MAY-2001;
25-MAY-2001;
25-MAY-2001;
25-MAY-2001;
30-MAY-2001;
31-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                    antiangiogenic, hypotensive, vulnerary and antiarteriosclerotic activities, and can be used in gene therapy. The PRO polynucleotides, proteins, agonists and antagonists are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder in a mammal, e.g. cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, myocardial infarctions, thrombophlebitis, lymphangitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The PRO polynucleotides have applications in molecular biology, including use as hybridisation probes, and in chromosome and gene mapping. ABL88259 to ABL88267 represent primers and probes used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                             Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      One hundred and eighty seven nucleic acids encoding useful in diagnosis and treatment of cardiovascular infarction), endothelial or angiogenic disorders in
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DB; ABL88120.
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                        PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                                  KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                                                                              GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
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PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                              KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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J, Gurney
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; 2001US-00854280.
2001US-00866028.
; 2001US-00866034.
; 2001WC-US017092.
; 2001WC-US0170974.
; 2001WC-US017443.
; 2001WC-US017443.
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L, Hillan KJ, Marsters
CK, Williams PM, Wood W
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polynucleotides have cardiant, cyto
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autoimmune disease; Śjogre's syndrome; systemic lupus erythematosus; rheumatoid arthritis; chronic lymphocytic leukaemia; multiple myelom Hodgkin's lymphoma; hypergammaglobulinemia; hypekokin's lymphoma; hypergammaglobulinemia; APRIL; a proliferation-inducing ligand; chromosome 13q34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human Neutrokine-alpha protein
             Misc-difference
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124. .1
/note= "Asn is N-glycosylated"
244. .249
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                /label= CD-VIII
/note= "Conserved domain
                                                                                                                                                                                                                                                                    /label= Mature human Neutrokine_alpha_protein
/note= "Specifically claimed in claim 2"
                                                                                                                                                                                                                                                                                                                                             'label= CD-II
'note= "Conserved domain II"
                                                                                                                                                                                                                                                                                                                                                                                                                     'label
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                                                                                      'label= Beta_sheet_D
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'note= "Conserved domain
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                                                                                                                                                                                                                                                                                                                                                                                                note= "Conserved domain I"
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                    "N-linked glycosylation
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                                  Beta_sheet_F
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25-MAY-2001;
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17-OCT-2000;
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23-AUG-2000;
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                                      MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
               LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP 120
                              MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                         100.0%; 9 ilarity 100.0%; 9 Conservative 0;
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and comparing the Neutrokine-alpha and APRIL expression level with a standard Neutrokine-alpha and APRIL expression level, whereby an increase or decrease in the assayed Neutrokine-alpha and APRIL expression level compared to the standard levels is indicative of a disease or disorder. The present amino acid sequence represents the human Neutrokine-alpha protein of the invention. This sequence is encoded by the human
                                                                                                                                                                                                                                                                                                             or hypergammaglobulinemia, or in diagnosing a disease or disorder comprising assaying expression of Neutrokine-alpha and APRIL (a proliferation-inducing ligand) in cells or body fluids using antibodies
                                                                                                                                                                                                                                                                                                                                                                                         invention is useful in treating a disease or disorder such as cancer, especially B-cell cancer, autoimmune diseases such as Sjogre's syndrome, systemic lupus erythematosus, rheumatoid arthritis, chronic lymphocytic leukaemia, multiple myeloma, Hodgkin's lymphoma, non-Hodgkin's lymphoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to a new antibody, or portion, that specifically binds to a protein which has a 285 or 250 amino acid sequence as fully defined in the specification. The antibody of the sequence as fully defined in the specification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         An isolated antibody or useful in the treatment
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                                                                                                                                Neutrokine-alpha gene located
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2000US-0250020P.
2001US-0276248P.
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2001US-0304809P
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   Query Match
Best Local
                                                                      amelioration of a disease or disorder associated with: aberrant B lymphocyte stimulator (BLyS), BLyS receptor expression or activity; cells of haematopoietic origin; or proliferative disease; and reducing, inhibiting or stimulating immunoglobulin production, B cell proliferation and graft rejection involving administration of BLyS binding polypeptide. The BLyS binding polypeptides are used in the treatment, prevention or amelioration of diseases such as immune system diseases, proliferative diseases, diseases of cells of hematopoietic origin, graft rejection, allergies, infectious diseases, arteriosclerosis, inflammatory disorders, hypergammaglobulinaemia, blood clotting disorders, ischaemia, and neurodegenerative diseases. The present sequence is a B lymphocyte stimulator protein
                                                                                                                                                                                                                                                                                                            The treatment administering
                                           Sequence
                                                                                                                                                                                                                                                                                Disclosure; Page 302-303; 387pp;
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                                                                                                                                                                                                                                                                                                          of various diseases e.g. rheumatoid arthritis, B Lymphocyte stimulator binding polypeptide.
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  The present invention describes a human tumour necrosis factor receptor designated Ztnfr12 (I). (I) has cytostatic, immunosuppressive, dermatological, antiinflammatory, neuroprotective, antidiabetic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 neuroprofective; antirheumatic; antiarthritic; antiasthmatic; nephrotropic; hypotensive; gene therapy; B lymphocyte; tumour; autoimmune disorder; systemic lupus erythematosus; myasthenia gravis; multiple sclerosis; insulin dependent diabetes mellitus; asthma; rheumatoid arthritis; bronchitis; emphysema; renal disease; lymphoma; glomerulonephritis; vasculitis; chronic lymphoid leukaemia; nephritis; pyelonephritis; renal neoplasm; multiple myeloma; amyloidosis; light chain neuropathy; hypertension; large vessel disease; graft rejection; Crohn's disease.
                                                                                                       Disclosure;
                                                                                                                                                                                                                  Novel
                                                                                                                                                                                                                                                                       WPI; 2002-508212/54.
                                                                                                                                                                                                                                                                                                                            Gross
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20-DEC-2000; 2000US-0257131P
28-JUN-2001; 2001US-0301715P
29-AUG-2001; 2001US-0315565P
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                                                                                                                                                             isolated human tumor necrosis factor receptor polypeptide, 12, useful for treating autoimmune disorders, emphysema, e failure or renal disease and lymphoma.
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CC antirheumatic, antiarthritic, antiasthmatic, nephrotropic and hypotensive activities, and can be used in gene therapy. (I) can be used for CC inhibiting, in a mammal, the activity of a ligand that binds Ztnfr12 CC (e.g. ZTNF4), for treating disorders and diseases associated with B CC lymphocytes, activated B lymphocytes or resting B lymphocytes, and for CC inhibiting the proliferation of tumour cells. (I) is useful for treating CC autoimmune disorders such as systemic lupus erythematosus, myasthenia CC rheumatoid arthritis, bronchitis, emphysema and end stage renal failure or renal disease such as glomerulonephritis, vasculitis, chronic lymphoid CC leukaemia, nephritis, and pyelonephritis, and for treating renal CC neoplasms, multiple myelomas, lymphomas, light chain neuropathy, or CC amyloidosis, hypertension, large vessel diseases, graft-versus host CC disease, graft rejection and Crohn's disease. (I) is useful for CC development, for modulating development of other cells, antibody CC production and cytokine production, and for modulating T and B cell Cc communication. The present sequence represents the human ZTNF4 protein with the production of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 23
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Best Local S
Matches 285
                                                                                                                   Human; Neutrokine-alpha; cytokine; autoimmune disease; cancer; systemic lupus erythematosus; ribeumatoid arthritis; Sjoyren's syndib cell cancer; chronic lymphocytic leukaemia; multiple myeloma; bell cancer; chronic lymphocytic leukaemia; multiple myeloma; Hodgkin's lymphoma; non-Hodgkin's lymphoma; immunodeficiency; hypergammaglobulinaemia; rheumatic heart didiabetes mellitus; autoimmune thyroiditis; Goodpasture's syndrome; Graves' disease; myasthenia gravis; autoimmune haemolytic anaemia; infertility; chronic active hepatitis; primary biliary cirrhosis; infertility; chronic active hepatitis; primary biliary cirrhosis; inflammatory skin disease; psoriasis; allergy; atherosclerosis; autoimmune thrombocytopaenia; antibody; chromosome 13q34.
                                       US2002115112-A1.
                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                     Human Neutrokine-alpha.
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Pred. No. 1.3e-144;
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The invention relates to an isolated antibody (I) or its portion that compedifically binds to a 285 residue neutrokine-alpha protein sequence or a 250 residue APRIL (proliferation inducing ligand) polypeptide sequence (S2). Also included are: (I) an antibody or its portion that competitively inhibits the specific binding of (I) by at least 50 or 90 % (2) a nucleic acid encoding the antibody (I) (or its single chain); (3) a vector comprising the nucleic acid; (4) a host cell comprising the nucleic acid or vector; and (5) a hybridoma producing the antibody. The cantibody is useful for treating disease or disorder such as autoimmune (C antibody is useful for treating disease or disorder such as autoimmune (C syndrome, cancer, preferably B cell cancer, chronic lymphocytic (C leukaemia, multiple myeloma, Hodgkin's lymphoma and non-Hodgkin's (C syndrome, Graves' disease, Myso or hypergammaglobulinaemia, rheumatic (C syndrome, Graves' disease, myasthenia gravis, autoimmune haemolytic (C anaemia, infertility, chronic active hepatitis, primary biliary (c complex mediated diseases and autoimmune thrombocytopaenia. The antibody (c syndrome, allergic conditions, atherosclerosis, antigen- antibody (c sis also useful for diagnosing the disease or disorder, by assaying (expression of Neutrokine-alpha and APRIL expression level, in cells or body fluid of an indvidual and comparing the levels with a standard (c expression level, where an increase or decrease in the assayed Neutrokine
        14-JAN-2000

22-FEB-2000

02-JUN-2000

08-JUN-2000

08-JUN-2000

08-JUN-2000

08-JUN-2000

08-JUN-2000

15-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel antibody that binds to neutrokine-alpha protein, useful for diagnosing and treating diseases or disorders, such as autoimmune diseases, lupus erythematosus, rheumatoid arthritis, cancer, or an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-JUL-1999;
24-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Fig 1; 203pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                immunodeficiency.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; neutrokine-alpha protein; Hashimoto's thyroiditis; dermatitis; rheumatoid arthritis; leukaemia; acquired immune deficiency syndrome; multiple sclerosis; uveitis ophthalmia; diabetes; lupus erythematosus; pneumonia; meningitis; gonorrhoea; hepatitis; Crohn's disease; asthma; tumour; tumour metastasis; autoimmune disease; graft versus host disease; infection; immunodeficiency; antibody therapy; antibacterial; viruoide; antiinflammatory; immunosuppressive; antianaemic; ophthalmological; antiinflammatory; immunosuppressive; antianaemic; ophthalmological;
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94. .10
  /note=
185. .2
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                                                                                                                                                   /note=
128
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                                                                                                                                                                                                                                                                                                                                 /note=
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                                                                                                                     "N-glycosylation site"
                                                                                                                                                                           "N-glycosylation
                                                                                                                                                                                                                                                                                                                              "Transmembrane domain"
                                                                                                                                                                                                                                                                                                                                                                                    "Conserved domain-I"
                          "Conserved
                                                                                                                                                                                                                                "Conserved domain-III"
                                                                                                                                                                                                                                                                              "Conserved
                                                                             "Conserved
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                          domain-V"
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No. 1.3e-144;
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12-WAR-1999
26-WAR-1999
02-APR-1999
16-APR-1999
23-APR-1999
27-APR-1999
29-APR-1999
28-WAY-1999
06-UTL-1999
27-UTL-1999
27-WUTL-1999
28-WAY-1999
                               specifically binds to neutrokine-alpha proteins. Antibodies of the invention are useful for detecting neutrokine-alpha protein. They are useful to prevent, treat, prognose and/or diagnose rheumatoid arthritis, Hashimoto's thyroiditis, dermatitis, leukaemia, AIDS (acquired immune deficiency syndrome) multiple sclerosis, weitis ophthalmia, diabetes, lupus erythematosus, pneumonia, meningilis, gonorrhoea, hepatitis, Crohn's disease and asthma. Sequences of the invention are useful to treat, prevent, prognose and/or diagnose tumour, tumour metastasis, inflections by bacteria, viruses and other parasites, immunodeficiencies, inflammatory diseases, autoimmune disease, graft versus host disease. They are useful in antibody therapy. The present sequence is human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-OCT-1996;
14-JAN-1997;
12-JAN-1998;
                                                                                                                                                                                                               protein, useful to immunodeficiencies,
                                                                                                                                                      The present invention relates to a novel antibody or its portion the specifically binds to neutrokine-alpha proteins. Antibodies of the
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23-DEC-1999;
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02-MAR-1999;
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                        neutrokine-alpha
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                                                                                                                                                                                                              isolated antibody or its portion that binds to neutrokine-alpha in, useful to treat, prevent, prognose and/or diagnose odeficiencies, inflammatory diseases, autoimmune disease and tume
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99US-0130596P

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99US-0131278P

99US-013178P

99US-013678P

99US-014789P

99US-0147834P

99US-0168624P

99US-0168624P

99US-01712108P

99US-01712108P
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This invention describes novel antibodies that immunospecifically B Lymphocyte Stimulator (BLyS) polypeptides. BLyS is a member of t tumour necrosis factor (TNF) super family and induces B cell proliferation and differentiation. The antibodies of the invention cytostatic, immunosuppressive, immunostimulant, immunomodulatory,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BLys; B lymphocyte stimulator; TNP superfamily; human; cytostatic; tumour necrosis factor; B cell proliferation; B cell differentiation; immunosuppressive; immunostimulant; immunomodulatory; antirheumatic; antiAIDS; vaccine; cancer; immune; autoimmune disorder; immunodeficiency; systemic lupus erythematosus; rheumatoid arthritis; CVID; AIDS; common variable immunodeficiency; acquired immunodeficiency syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                           16-JUN-2000; 2000US-0212210P.
17-OCT-2000; 2000US-0240816P.
16-MAR-2001; 2001US-0276248P.
21-MAR-2001; 2001US-0277379P.
25-MAY-2001; 2001US-0293499P.
                                                                                                                                                      Example 14;
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ilarity 100.0%;
Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                        ANTIBODY
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                                                                                                                                                                                                                                                                                                                                                                        TECHNOLOGY.
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Pred. No. 1.3e-144;
Mismatches 0;
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                                                                                                                                                                                               ating polypeptides, immune disorders.
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RESULT 26 ABG33576

ABG33576

standard;

protein;

285

Human B Lymphocyte Stimulator

(BLyS)

protein

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Stimulator binding blood; urine; spina

15-JUL-2002

(first entry)

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Best Local S
Matches 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antirheumatic and antiAIDS activity and can be used in vaccines to inhibit the expression and activity of BLyS. The antibodies bind to BLyS and so may be used to detect and quantitate the presence of BLyS in biological samples and may be used in this way to diagnose disease associated with aberrant expression of BLyS. They may also be administered to treat diseases associated with aberrant BLyS expression and activity such as cancer, immune, and autoimmune disorders and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  diseases, e.g. systemic lupus erythematosus, rheumatoid arthritis, immunodeficiency (e.g. common variable immunodeficiency (CVID) and acquired immunodeficiency syndrome (AIDS)). ABP43990-ABP47228 represent the antibodies and fragments of the antibodies described in the method
                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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hes 285;
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                       PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                                      KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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                                                                                                                                                                                                                                      LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                   KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                                                                     GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
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Pred. No. 1.3e-144;
Mismatches 0;
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B Lymphocyte Stimulator protein; B Lymphocyte BLyS; biological fluid; serum; plasma; lymph; synovial fluid; saliva; mucus; human.
18-AUG-2000;
                                             17-AUG-2001;
                                                                                          28-FEB-2002
                                                                                                                                                                                sapiens
  2000US-0226489P
                                               2001WO-US025891
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New B-lymphocyte stimulator isolating BLyS or BLyS-like

binding polypeptide useful in polypeptide comprises a specif

specified

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2002-351647/38

Potter CORP

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RESULT 27
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Matches 285
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                                                                                                                                                                                                                                                                                                                                                                                                                                Human; tumour; B-cell maturation antigen; transmembrane activator; calcium-modulator; cyclophilin ligand-interactor; TACI; gene therapy; neoplasm; chronic lymphocytic leukaemia; lymphoproliferative disease; non-Hodgkin's lymphoma; light chain gammopathy; inflammation; asthma; BCMA; multiple myeloma; ZTN4 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human
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                                                                                                                                    20-FEB-2001;
12-APR-2001;
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                                                                                                                                    2001US-0270274P.
2001US-0283447P.
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Pred. No. 1.3e-144;
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RESULT 28
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ID AAU75

AAU75409 standard;

protein;

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cerebroprotective; nootropic, neuroprotective; hepatotropic; immunoglobulin production; B cell proliferation; immunosuppressive; HIV; human immunodeficiency virus; autoimmune disease; immunodeficiency; Sjogren's syndrome; systemic lupus erythematosus; Hodgkin's disease; common variable immunodeficiency; CVID; non-Hodgkin's lymphoma; AIDS; acquired immunodeficiency virus; cancer; multiple myeloma; CLL; chronic lymphocytic leukaemia; lymphoproliferative disorder; bacterial infection; viral infection; osteoporosis; atherosclerosis; bacterial infection; viral infection; osteoporosis; atherosclerosis; pain; cardiovascular disorder; stroke; allegy; Alzheimer's disease; neurodegenerative disease; inflammation; liver disease; cirrhosis; cardiomyopathy; diabetee; asthma; psoritasis; glomerulonephritis; ulcerative colitis; angiogenesis; septic shock; wound healing; neutrokine-alpha; B lymphocyte stimulator; BHyS.

Tumour necrosis factor; TNF; cytostatic; arteriosclerosis; analgesic;

Neutrokine-alpha

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lymphocyte stimulator BLyS).

09-APR-2002

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Best Local 9
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                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to the manufacture of a composition for inhibiting the proliferation of tumour cells. The method involves using an antibody component that binds both the B-cell maturation antigen (BCMA) and the transmembrane activator and calcium-modulator and cyclophilin ligand interactor (TACI) BCMA and TACI binding antibody compositions are useful for inhibiting proliferation of tumour cells, particularly inhibiting ZTMF4 activity in a mammal associated with increased endogenous antibody production or a disorder consisting of neoplasm, chronic lymphocytic leukaemia, multiple myeloma, non-Hodgkin's lymphoma, post-transplantation lymphoproliferative disease or light chain gammopathy or inflammation e.g. astima. The invention is also useful in gene therapy. The present is human ZTM4 protein. This sequence is used in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B-cell maturation antigen and transmembrane activator and modulator and cyclophilin ligand-interactor, useful for tidisorders e.g. inflammation or lymphoma.
                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 285
                                                                                                                                                                                                                                                                                                                                      hes 285;
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                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                       GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                                                                                                LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                                                                                                                                                                        MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                                                                KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                                                                  GEGNSSONSRNKRAVOGPEETVTODCLOLIADSETPTIOKGSYTFVPWLLSFKRGSALEE
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                       PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                                                                                                                                                                                                                      MDDSTEREOSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
 PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                   KENKILVKETGYFFIYGOVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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treating
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                                                                                                                                                              CC delta or egsilon protesin (I). (I) or a composition containing them (II) CC are useful for modulating immunoglobulin production or proliferation of B CC cells. (I) or (II) is useful; for treating a disease or disorder of the CC immune system, preferably an autoimmune disease (e.g. Sjogren's syndrome, CC systemic lugus erythematosus or common variable immunodeficiency (CVID)); cc an immunodeficiency e.g. acquired immunodeficiency y(CVID)); cc anicer of the immune system (e.g. Hodgkin's disease, non-Hodgkin's CC lymphoma, multiple myeloma and chronic lymphocytic leukaemia (CLL)); in CC the diagnosis and treatment or prevention of cancer, lymphoproliferative the disease (e.g. Stroke), allergy, inflammation, cc neurodegenerative disease (e.g. Stroke), allergy, inflammation, cc neurodegenerative disease (e.g. Albeimer's disease), liver disease (e.g. Cirrhosis), cardiowyopathy, diabetes, asthma, psoriasis, septic shock, cc glomerulonephritis, ulcerative, as a stroke), allergy, inflammation, capant to target and kill cells expressing a TNFdelta and/or TNFpsilon CC activation and proliferation; and as an immunogen to produce (II). (II) cis useful to purify, detect and target (I), for measuring levels of (I) is useful to prevent diseases and disorders associated with aberrant cc inhibit or prevent diseases and disorders associated with aberrant cc neutroxine-alpha (or Blymphocyte stimulator BLyS) which forms cc described in the method of the invention
                                                                                                           Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JUN-2000;
23-OCT-2000;
13-DEC-2000;
16-MAR-2001;
23-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel multimeric human tumor necrosis factor delta or epsilon protein useful for treating cancer, immune system disorders, infection, cardiovascular disorders, liver disease, cardiomyopathy, diabetes and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Yu G,
                                                                                                                                                            Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-JUN-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          invention describes a multimeric human tumour necrosis factor
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                                                                                                             Similarity
                                                       MDDSTEREOSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
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                               MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
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2000US-0254875P.
2001US-0276248P.
2001US-0277978P.
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134. .28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /label= Mature_neurokine-alpha
/note= "Specifically claimed in claim
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Pred. No. 1.3e-144;
Mismatches 0;
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LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEBAPAVTAGLKIFEPPAP

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RESULT 29
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ID IN ADUI0942
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The invention relates to a composition (I) comprising AGP-3 receptor (tumour necrosis factor ligand family member) related protein (II) attached to a vehicle protein. (I) is useful for modulating AGP-3-related activity in mesenteric lymph nodes (MIN) of a mammal. (II) is useful in assays to identify cells and tissues that express AGP-3R or proteins related to AGP-3R-related protein and for identifying compounds (agonists or antagonists) that interact with AGP-3R proteins. (II) is also useful for identifying intracellular proteins that interact with the respective cytoplasmic domains by yeast two-hybrid screening process. (II) is node, spleen, and Peyer's patches. AGP-3R agonists and antagonists identified using (II) are used for modulating B cell response and are used to treat diseases characterised by inflammatory processes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; AGP-3; antiinflammatory; antiarthritic; immunosuppressive; dermatological; neuroprotective; noctropic; immunomodulator; metabolic; antidiabetic; analgesic; nephrotropic; osteopathic; cytostatic; fever; antiparkinsonian; antipsoriatic; vasotropic; antibacterial; asthma; AGP-3 receptor; tumour necrosis factor ligand family; AGP-3 receptor; mesenteric lymph node; AGP-3R; inflammatory disease; immune disorder; rheumatoid arthritis; graft-versus-host disease; Crohn's disease; pancreatitis; amyotrophic lateral sclerosis; ALS; ALSheimer's disease; diabetes; glomerulonephritis; inflammatory bowel disease; ischaemia; multiple sclerosis; Parkinson's disease; transgenic animal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Composition, useful for identifying modulator of receptor for treating asthma and glomerulonephritis, comprises AGP-3 (tumor necrosis factor ligand family member) receptor and encoding nucleic acids.
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RESULT 30
ABB95471
ID ABB95471
ABB95471
ABB95471
AC ABB95
XX 19-JU
DT 19-JU
XX 19-JU
XX 40
Ather
KW Ather
KW antia
XX Homo
XX Homo
XX Homo
XX 1-JA
XX 20-JU
PR 25-JU
PR 25-JU
PR 25-JU
PR 27-AU
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CC host disease, Crohn's disease, lupus, etc. (II) is also useful in the
CC production of hybridoma cells which are derived from B cells, which
CC involves treating the hybridoma cells with (II). (II) is useful in the
CC carthritis, osteoarthritis, etc. (II), its agonists or antagonists are
CC carthritis, osteoarthritis, etc. (II), its agonists or antagonists are
CC carthritis, osteoarthritis, etc. (II), its agonists or antagonists are
CC carthritis, osteoarthritis, acute pancreatitis, amyvtrophic lateral sclerosis,
CC diabetes, fever, glomernlonephritis, inflammatory bowel disease,
CC diabetes, fever, glomernlonephritis, inflammatory bowel disease,
CC diabetes, fever, glomernlonephritis, inflammatory bowel disease,
CC sclerosis, osteoporosis, Parkinson's disease, pain, reperfusion injury,
CC septic shock, etc. The nucleic acids are also useful for developing
CC transgenic animals expressing (II), which are useful for producing the
CC polypeptides and for the study of in vivo biological activity. The
CC present sequence represents the amino acid sequence of human AGP-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 285
              20-JUL-2000;
25-JUL-2000;
25-JUL-2000;
25-JUL-2000;
28-JUL-2000;
02-AUG-2000;
17-AUG-2000;
                                                                                                                                                                                                                                                                                   Human; angiogenesis; PRO protein; cardiovascularisation; wound; atherosclerosis; cardiac hypertrophy; gene therapy; endothelial cardiant; cytostatic; antiangiogenic; hypotensive; vulnerary;
                                                                                                                                                                                                                                                                        antiarteriosclerotic.
                                                                                                                                                                                                                                                                                                                                                          Human
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2000US-0219556P
2000US-0220664P
2000US-0220664P
2000WG-US020710
2000US-022659P
2000US-023522
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                                                                                                                                      2001WO-US021735
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disorder;
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Query Match 100
Best Local Similarity 100
Matches 285; Conservative
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22-MAR-2001;
05-APR-2001;
10-MAY-2001;
10-MAY-2001;
25-MAY-2001;
25-MAY-2001;
25-MAY-2001;
25-MAY-2001;
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07-SEP-2000
18-SEP-2000
24-OCT-2000
08-NOV-2000
08-NOV-2000
01-DEC-2000
01-DEC-2000
20-DEC-2000
20-DEC-2000
22-DEC-2000
22-DEC-2000
22-DEC-2000
23-FEB-2001
28-FEB-2001
01-NAR-2001
                                                              The present invention provides the protein and coding sequences pRO proteins. These are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder, including ca hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid angina, myocardial infarctions, thrombophlebitis, lymphangitis, angiogenesis (such as breast carcinoma and liver carcinoma) and healing. The present sequence is a PRO protein of the invention
                                                                                                                                                                                                                                                            Baker KP,
Godowski I
                                                            angina, myocardial angiogenesis (such healing. The preser
                                         Sequence
                                                                                                                                                        Claim 11; Fig
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(WATA/
(WILL/
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(GURN)
(HILL)
(MARS)
(PANJ)
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01-JUN-2001;
                                                                                                                                                                             infarction),
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DB; ABL95609.
                                                                                                                                                                            ndred and eighty seven nucleic acids encoding in diagnosis and treatment of cardiovascular tion), endothelial or angiogenic disorders in
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PAONI N F.
STEPHAN J'F.
WATANABE C K.
WILLIAMS P M.
WOOD W I.
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BAKER K P.
FERRARA N.
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JF,
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2000US-00664510.
2000US-00665350.
2000US-00709238.
2000WG-US030873.
2000WG-US030873.
2000WG-US032678.
2000US-00747259.
2000US-00747259.
2001US-0076769.
2001US-0076769.
2001US-00802706.
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                                          AA;
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L, Hillan KJ, Marsters SA,
CK, Williams PM, Wood WI,
  0,
                                                                                                                                                        English.
   Score 1451;
Pred. No. 1.3
0; Mismatches
DB 5;
1.3e-144;
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Gaps

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RESULT 31
ABO17627
ID ABO17
XX ABO17
XX ABO17
XX ABO17
XX ABO17
XX ABO17
XX Human
XW Human
XW Antid
XW Antid
XW Chrom
XW Gene
XW Gene
XW Syene
XW 110-81
XX Homo
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11-JUN 1997
11-JUN 1998
14-JUL 1998
128-AUG-1998
11-SEP 1998
14-SEP 1998
14-SEP 1998
14-SEP 1998
14-SEP 1998
17-SEP 1998
17-SEP 1998
29-CCT 1999
20-CCT 1999
20-CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; secreted and transmembrane protein; PRO; antiinflammatory; antiiarteriosclerotic; cardiant; anti-infertility; anti-HTV; cycostatic; antidiabetic; gene therapy; tumour necrosis factor (INF)-alpha release; miralpha release; cell proliferation; cell differentiation; gene expression modulator; proteoglycan release; cytokine release; tumour; inflammatory disease; organ failure; atherosclerosis; cardiac injury; infertility; birth defect; premature aging; AIDS; acquired immunodeficiency syndrome; cancer; diabetic complication; chromosome mapping; gene mapping; pharmaceutical; diagnostic; biosensor, bioreactor; tissue typing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003032156-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-MAY-2002;
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97WO-US005230
98WO-US014552
98WO-US017888
98WO-US019093
98WO-US019093
98WO-US019330
98WO-US019437
98WO-US0219437
98WO-US022991
98WO-US022991
98WO-US022991
98WO-US026106
99WO-US005190
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99WO-US005190
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    13-SEP-1999
15-SEP-1999
15-SEP-1999
25-OCT-1999
25-OCT-1999
20-DEC-1999
20-DEC
99WO-US020594
99WO-US021547
99WO-US021547
99WO-US021547
99WO-US0283113
99WO-US028313
99WO-US028314
99WO-US028551
99WO-US028551
99WO-US0308551
99WO-US0308551
99WO-US03099
99WO-US030991
99WO-US030991
99WO-US0301274
2000WO-US0301274
2000WO-US0301274
2000WO-US0304341
2000WO-US0043441
2000WO-US0043441
2000WO-US0044441
2000WO-US0044441
2000WO-US006884
2000WO-US006884
2000WO-US006884
2000WO-US0087466
2001US-00854280
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2001US-008660216
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                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
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09-AUG-2001;
16-AUG-2001;
19-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                             hybridisation probes, in chromosome and gene mapping, and in generating antisense RNA or DNA. The polypeptides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. Both are useful in tissue typing This is the amino acid sequence of a novel human secreted and transmembrane PRO polypeptide
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Gerritsen ME, Goddard
Smith V, Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 12;
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Tumas D,
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A, Godowski PJ, Gurney AL, Sherwood
Tumas D, Watanabe CK, Wood.WI, Zhang
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Pred. No. 1.3e-144;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to fusion proteins comprising transmembrane activator and calcium modulator and cyclophilin ligand-interactor (Traceptor group that binds tumour necrosis factor-like protein (ZTNF) ZTNF4; and an immunoglobulin group comprising a constant region of a immunoglobulin. The invention is used to manufacture a medicament fo inhibiting the proliferation of tumour cells in a mammalian subject composition comprising the fusion protein may also be used in treating autoimmune diseases (e.g. systemic lupus erythematosus, multiple acceptable of the confidence of the confide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              glomerulonephritis; asthma, bronchitis; graft rejection; septic shock; dermatological; neuroprotective; cyclophilin ligand-interactor; human; autoimmune disease; systemic lupus erythematosus; multiple sclerosis; diabetes mellitus; rheumatoid arthritis; renal disease; inflammation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Transmembrane activator and calcium modulator interactor (TACI)-immunoglobulin fusion protein
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glomerulonephritis; asthma; bronchitis; graft rejection; septi
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16-NOV-2001;
07-DEC-2001;
01-APR-2002;
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                                                 Ullrich
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Matches 285
                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a method for treating immune system cancer or leukaemia by administering to an individual, a neutrokine-alpha or neutrokine-alpha splice variant (SV) protein. The method is useful for treating cancer of immune system, such as metastatic tumour, or leukaemia. The present sequence is human neutrokine-alpha protein. Human neutrokine-alpha gene is located at chromosome 13q34. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Treating
                                                                                                                                                                                                                                                                                                Local L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Treating immune system cancer or leukemia involves administering individual Neutrokine-alpha polypeptide.
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                                                                                                                                            GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                                                                            LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                                                                                                                                  MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                                                                                                                                                                                                                                  MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                             PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL 285
                                                                              KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                                                          GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                                                       LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                                                                                                                                                                                                                                                           285 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fig 1; 520pp; English.
                                                            KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Neutrokine-alpha polypeptide.
                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                             100.0%;
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                                                                                                                                                                                                                                                                                                                             Score 1451; DB 6;
Pred. No. 1.3e-144;
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RESULT 34
ABU8081
ID ABU80
AC 
                                 18-JUN-1997;
26-AUG-1997;
17-SEP-1997;
17-SEP-1997;
17-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            anti-PRO antibody; diagnostic assay; gene expression; diabetes; bone disorder; cartilage disorder; rheumatoid arthritis; obesity; sports injury; osteoarthritis; hyper-insulinaemia; hypo-insulinaemia; hearing loss; coagulation disorder; stroke; heart attack; cardiant; antidiabetic; anorectic; vulnerary; antiarthritic; osteopathic; antirheumatic; auditory; cerebroprotective; angiogenic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; PRO polypeptide; secreted and transmembrane protein; anti-PRO antibody; diagnostic assay; gene expression; diabe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human PRO polypeptide #12.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                 97US-0049911P.
97US-0056974P.
97US-0059113P.
97US-0059115P.
97US-0059117P.
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                                                                                                                                                                                                                                                                                                                          The present invention relates to the isolation of novel human PRO CC polypeptides, and the polynucleotide sequences encoding them. The PRO CC polypeptides are secreted and transmembrane proteins. The PRO CC polypeptides and polynucleotides are useful for preparing a medicament CC useful in the treatment of diabetes, bone and/or cartilage disorders CC (e.g. rheumatoid arthritis, sports injuries, osteoarthritis), obesity, CC (hyper- or hypo-insulinaemia, hearing loss, and coagulation disorders CC (e.g. stroke, heart attack). Anti-PRO antibodies are useful in diagnostic CC (e.g. stroke, heart attack). Anti-PRO antibodies are useful in diagnostic CC cassays for PRO, by detecting its expression in specific cells, tissues or CC cassays for affinity purification of PRO from recombinant cell culture CC or natural sources. ABU80870-ABU81144 represent the human PRO CC polypeptides of the invention. Note: The sequence data for this patent CC was obtained in electronic format directly from the USPTO web site at CC sequata.uspto.gov/psipsDIDEntry.html
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Best Local S
Matches 285
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01-DEC-1999;
02-DEC-1999;
02-DEC-1999;
16-DEC-1999;
16-DEC-1999;
20-DEC-1999;
20-DEC-1999;
30-DEC-1999;
30-DEC-1999;
30-DEC-1999;
30-DEC-1999;
16-FEB-2000;
11-FEB-2000;
11-FEB-2000;
11-FEB-2000;
12-FEB-2000;
14-FEB-2000;
06-JMR-2000;
01-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated PRO parthritis, sports heart attack.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-352836/33.
N-PSDB; ACA67005.
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Gerritsen ME, Goddard
Smith V, Stewart TA,
                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 12; Fig
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                                                                                                                                                                                                                                       n 100.0%;
Similarity 100.0%;
85; Conservative 0;
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                                                                                                                                                                                                MDDSTEREOSRLTSCLKKREEMKLKECVS1LPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                                                                                                     LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEBAPAVTAGLKIFEPPAP
                                                                                                                                                                                                                                                                                                     285
                                                         GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                             GEGNSSONSRNKRAVQGPBETVTQDCLQLIADSETVTIQKGSYTFVVVLLSFKRGSALEE
                                                                                                                                                                              MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                   KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVEGDELSLVTLFRCIQNMPETL
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99WO-US028564

99WO-US028564

99WO-US030095

99WO-US030091

99WO-US030991

99WO-US031274

2000WO-US030277

2000WO-US030277

2000WO-US03516

2000WO-US03565

2000WO-US03566

2000WO-US03664

2000WO-US04344

2000WO-US0444

2000WO-US04444

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2000WO-US04444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRO polypeptide useful ports injuries, obesity,
                                                                                                                                                                                                                                                                                                     AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24; 643pp; English.
                                                                                                                        QVAALQGDLASIRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INC.
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                          Score 1451;
Pred. No. 1.3;
Nismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for treating diabetes, rheumatoid, hearing loss in mammals, stroke,
                                                                                                                                                                                                                                                           DB 6;
L.3e-144;
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97US-0059184P.
97US-005958P.
97US-00528SP.
97US-006228SP.
97US-006228SP.
97US-006228SP.
97US-00628SP.
97US-006304SP.
97US-006304SP.
97US-006304SP.
97US-006305SP.
97US-0063187P.
97US-006318P.
97US-006319P.
98US-007792P.
98US-007792P.
98US-007792P.
98US-007923P.
98US-007928P.
98US-007923P.
98US-007923P.
98US-007923P.
98US-007923P.
98US-007923P.
98US-007923P.
98US-007923P.
98US-007923P.
98US-007928P.
98US-00

24-SEP-1997
17-CCT-1997
17-CCT-1997
17-CCT-1997
17-CCT-1997
24-CCT-1997
24-CCT-1997
24-CCT-1997
24-CCT-1997
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28-CCT-1997
29-CCT-1997
29-CCT-1997
29-CCT-1997
21-NCV-1997
21-NCV-1998
21-NCR-1998
21-SEP-1998
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21-SEP-1999
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21-SEP-1999
21-SEP-1999
21-SEP-1999
21-SEP-1999
21-NCV-1999

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Human; PRO polypeptide; secreted and transmembrane protein; tumour necrosis factor-alpha; TNF-alpha; blood; proliferation; differentiation; chondrocyte; tumour; genetic disorder; cytostatic.
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   98WO-US017888

98WO-US019094

98WO-US019094

98WO-US01933

98WO-US01933

98WO-US01933

98WO-US0291141

98WO-US02291

98WO-US022194

99WO-US025108

99WO-US025108

99WO-US005108

99WO-US005108

99WO-US005109

99WO-US01225

99WO-US01225

99WO-US01225

99WO-US01225

99WO-US020111

99WO-US0300011

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     entry)
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     18-FEB-2000
21-FEB-2000
22-FEB-2000
24-FEB-2000
21-MAR-2000
01-MAR-2000
01-MAR-2000
11-MAR-2000
21-MAR-2000
21-MAR-2000
21-MAR-2000
21-MAR-2000
21-MAR-2000
21-MAR-2000
21-MAY-2000
21-MAY-2000
21-MAY-2000
22-MAY-2000
23-MAY-2000
24-AUG-2000
25-MAY-2000
26-FEB-2001
26-FEB-2001
27-MAY-2001
28-FEB-2001
29-MAR-2001
21-MAY-2001
21-MAY
The present invention relates to the isolation of novel human polypeptides, and the polynucleotide sequences encoding them. polypeptides are secreted and transmembrane proteins. The PRO
                                                                                                       New secreted and transmembrane PRO nucleic acids, useful for gene therapy, in chromosome and gene mapping, as chromosome markers, in typing, and in chromosome identification.
                                                                                                                                                                                                                                  Baker KP, Beresini M,
Gerritsen ME, Goddard
Smith V, Stewart TA,
                                                                           Claim
                                                                                                                                                                               WPI; 2003-332040/31.
N-PSDB; ACA03614.
                                                                                                                                                                                                                                                                                                          (GETH ) GENENTECH INC.
                                                                       12; Fig
                                                                                                                                                                                                                                                                                                                                        2001WG-US034956

2001WG-US06520

2001WG-US006520

2001WG-US006666

2001US-00816744

2001US-00854208

2001US-00854208

2001US-00854208

2001US-008660216

2001US-00860217092

2001US-00872035

2001US-00872036

2001US-00872036

2001US-00872036

2001US-00872036

2001US-00887179

2001US-00887179

2001US-0090887179

2001US-0090887179

2001US-009088772

2001US-009088772
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2000WO-US0075377
2000WO-US0075377
2000WO-US008439
2000WO-US014941
2000WO-US014941
2000WO-US015264
2000WO-US02031
2000WO-US02031
2000WO-US02031
2000WO-US033522
2000WO-US033673
2000WO-US033673
2000WO-US033673
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2000WO-US004914
2000WO-US005004
2000WO-US005601
2000WO-US005846
2000WO-US005841
2000WO-US005819
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2000WO-US004342
2000WO-US004414
                                                                       24; 660pp;
                                                                                                                                                                                                                              Deforge L, Desnoyers L, Filvaroff E, G
A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
                                                                       English
                  The
                                                                                                                                                                                                                                                                      Gao W;
                      PRO
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RESULT 35
ABUG6 581
ID 46581
ID 4668
AC ABUG6
AC

07-OCT-1998 29-OCT-1998

14-SEP-1998; 14-SEP-1998; 16-SEP-1998;

09-MAY-2002;

20-FEB-2003

Human 23-MAY-2003 ABU66581;

29-OCT-1998
20-NCV-1998
01-DEC-1999
10-MAR-1999
10-MAR-1999
10-MAR-1999
10-MAR-1999
10-MAR-1999
11-SEP-1999
11-SEP-1999
13-SEP-1999
15-SEP-1999
16-DEC-1999
30-DEC-1999

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RESULT 36
ABU59662
ID ABU59
XX ABU59
AC ABU59
AC ABU59
AC ABU59
XX 13-MA
AC ABU59
XX I3-MA
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Matches 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polypeptides are useful for detecting other PRO polypeptides, for linking bioactive molecules to cells expressing PRO polypeptides, for modulating biological activities of cells expressing PRO polypeptides, and for for identifying agonists or antagonists. The PRO polypeptides are useful for for stimulating the release of tumour necrosis factor (TNF)-alpha from human blood, for stimulating the proliferation of differentiation of chondrocytes, and detecting the presence of tumours. The polymucleotide sequences encoding PRO polypeptides are useful as hybridisation probes, in chromosome and gene mapping, in the generation of antisense RNA and DNA, in the preparation of PRO polypeptides, for generating transgenic animals or knockout animals, for the genetic analysis of individuals with genetic disorders, and in gene therapy. ABU66570-ABU66844 represent the human PRO polypeptides of the invention. Note: The sequence data for this patent was obtained in electronic format directly from the USPTO web site
                                                                                                                                                              Human; PRO; hypertrophy of neonatal heart; angiogenesis; wound healing; cardiac insufficiency disorder; cancer; tumour; humune response; adrenal cortical capillary endothelial growth; c-fos induction; vascular endothelial growth factor inhibition; VEGF inhibition; endothelial cell growth inhibitor; T-lymphocytes stimulation; retinal neurons cell survival; rod photoreceptor cell survival; rod photoreceptor cell survival; rad photoreceptor cell survival; dermatitis; herpetiformis; Crohn's disease; chondrocyte proliferation; chondrocyte redifferentiation; sports injury; arthritis.
                                                                                                                                                                                                                                                                                                                                               Novel
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   31-MAR-1997;
                                  07-MAY-2002; 2002US-00140808.
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   97WO-US005230
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28-AUG-1998;
10-SEP-1998;
14-SEP-1998;
14-SEP-1998;
14-SEP-1998;
16-SEP-1998;
17-SEP-1998;
07-OCT-1998;
   02-JUN-1999
08-SEP-1999
08-SEP-1999
11-SEP-1999
15-SEP-1999
15-SEP-1999
20-NOV-1999
30-NOV-1999
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02-DEC-1999
03-JAN-2000
06-JAN-2000
06-JAN-2000
07-MAR-2000
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05-JAN-1999;
08-MAR-1999;
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20-APR-1999;
14-MAY-1999;
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14-JUL-1998;
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2000WO-US000377.
2000WO-US0003565.
2000WO-US004341.
2000WO-US004344.
2000WO-US0044914.
2000WO-US004914.
2000WO-US005041.
2000WO-US0056841.
2000WO-US006884.
2000WO-US006884.
2000WO-US006884.
2000WO-US006884.
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2000WO-US032678.
2000US-00747259.
2000WO-US034956.
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2000WO-US015264.
2000WO-US020710.
2000WO-US022031.
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2000WO-US030952
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2001WO-US006520
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98WO-US005028

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98WO-US014552.
98WO-US017888.
98WO-US018824.
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09-MAR-2001; 2001US-00802706

14-MAR-2001; 2001US-00816744

05-APR-2001; 2001US-00828366

10-MAY-2001; 2001US-00854280

10-MAY-2001; 2001US-00860216

25-MAY-2001; 2001US-00866028

25-MAY-2001; 2001US-00866028

25-MAY-2001; 2001US-00866034

25-MAY-2001; 2001US-00866034

25-MAY-2001; 2001US-00874503

10-JUN-2001; 2001WO-US017092

01-JUN-2001; 2001WO-US017800

05-JUN-2001; 2001WO-US017800

05-JUN-2001; 2001WO-US017803

14-JUN-2001; 2001US-0086342

20-JUN-2001; 2001WO-US019692

21-JUN-2001; 2001WO-US019692

21-JUN-2001; 2001WO-US019660

29-JUN-2001; 2001WO-US01735

18-JUL-2001; 2001WO-US021735

18-JUL-2001; 2001US-0098831

19-JUR-2001; 2001US-00931836

19-DEC-2001; 2001US-00931836
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_ GENENTECH INC

Gerritsen Smith V, , Beresini M, n ME, Goddard . Stewart TA, I A, Godow Tumas D, Deforge L, Desnoyers L, Godowski PJ, Gurney Watanabe Ç, L, Filvaroff E, y AL, Sherwood S; Wood WI, Zhang Z 27 Gao Ξ

N-PSDB; ABX89152. 2003-148238/14.

Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.

Claim 12; Fig 24; 659pp; English.

The invention describes an isolated human PRO polypeptide. The PRO CC polypeptides are useful in detecting PRO polypeptides in a sample, in CC linking a bioactive molecule to a cell expressing a PRO polypeptide, and CC in modulating at least one biological activity of a cell expressing a PRO polypeptide, and CC useful for treating cardiac insufficiency disorders. PRO154 and pRO156 CC polypeptide: PRO1312 stimulates hypertrophy of meonatal heart and is thus CC useful for treating cardiac insufficiency disorders. PRO154 and PRO156, CC PRO156 and PRO137 induce c-fos in endothelial growth, and are thus useful for treating conditions or disorders where angiogenesis would be beneficial, e.g. wound healing and antagonist of this polypeptide are CC useful for treating cancerous tumours. PRO812 inhibits vascular cells and is thus useful for inhibiting endothelial growth in CC mammals which would be beneficial in inhibiting tumour growth in CC mammals which would be beneficial in inhibiting tumour growth pRO826, PRO168, PRO1184, PRO1346 and PRO1375 stimulated proliferation of CC immune response. PRO828, for treating sequence of a sports injuries, and arthritis. This is the novel human PRO protein

Sequence 285

Claim 1; Page

608-609; 618pp; English

The invention relates to a novel TALL-1

antagonist protein, comprising

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RESULT 37
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Best Local Similarity
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                                                                                                                                                                                                            24-OCT-2001;
14-JAN-2002;
07-FEB-2002;
13-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                              human; TALL-1; antagonist; immunosuppressive; antirheumatic; antiinflammatory; antiarthritic; dermatological; antiidiabetic; neuroprotective; antithyroid; antipyretic; nephrotropic; vasotropic vaccine; autoimmune disease; rheumatoid arthriti; systemic lupus erythematosus; insulin dependent diabetes mellitus; multiple sclerosis; myasthaenia gravis; Grave's disease; autoimmune hemolytic anaemia; autoimmune thrombocytopenic purpura; Goodpasture's syndrome; pemphigus vulgaris; acute rheumatic fever; post-streptococcal glomerulonephritis; polyarteritis nodosa.
                                                             Novel TALL-1 antagonist protein useful for inhibiting TALL-1 be activity in mammal, has a modification in the region connecting strands D and E that reduces the biological activity of TALL-1
                                                 antagonist.
                                                                                                                                                        Zhang
                                                                                                                                                                                                                                                                           24-OCT-2002;
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DB; ADA49356.
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                                                                                                                                                                                   JEWISH MEDICAL
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; 2002US-0348962P.
; 2002US-0354966P.
; 2002US-0403364P.
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Pred. No. 1.3e-144;
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Sequence that differs from SEQ ID NO:2, or amount of the connecting abgr; strands CC No:2, by at least one modification in the region connecting abgr; strands CC D and E that reduces the biological activity of the TALL-1 antagonist as CC compared to wild-type TALL-1. A protein of the invention has CC compared to wild-type TALL-1. A protein of the invention has not protein of the invention antipretic, CC dermatological, antidiabetic, neuroprotective, antithyroid, antipretic, CC dermatological, and vasotropic activity. A TALL-1 antagonist may be used in CC avaccine. A protein of the invention is useful for inhibiting TALL-1 cc biological activity in a mammal. TC is useful for treating autoimmune CC diseases, rheumatoid arthritis, systemic lupus erythematosus, insulin CC dependent diabetes mellitus, multiple solerosis, myasthaenia gravis, CC Grave's disease, autoimmune hemolytic anaemia, autoimmune cc thrombocytopenic purpura, Goodbasture's syndrome, pemphigus vulgaris, autoi treating autoi munture the control protein control protein autoi munture anaemia, autoi munture anaemia, autoi munture the control protein control protein anaemia, autoi munture thrombocytopenic purpura, Goodbasture's syndrome, pemphigus vulgaris, con aute rheumatic fever, post-streptococcal glomerulonephritis and control protein control protein seguence represents human TALL-1.
Query Match
Best Local Sim:
Matches 285;
  31-MAR-1997;
12-JUN-1998;
14-JUL-1998;
28-AUG-1998;
                                                                                                                                                                                                                                                                  Human; PRO; secreted protein; transmembrane protein; tumour; cyto. gene therapy; tumour necrosis factor-alpha; TNF-alpha; blood; proteoglycan; cartilage; cytokine; peripheral blood mononuclear compand; glucose uptake; FFA; skeletal muscle cell; adipocyte cell; chondrocyte cell proliferation; chondrocyte cell differentiation; pericyte cell; inner ear utricular supporting cell; T-lymphocyte endothelial cell; A-peptide; factor VIIA.
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18-MAY-2001; 05-APR-2001; 10-MAY-2001;

2001US-0082B366. 2001US-00854208. 2001US-00854280. 2001US-00860216.

14-JUN-2001; 19-JUN-2001; 20-JUN-2001;

2001US-00886342. 2001WO-US019692. 2001US-00887879. 2001WO-US020116.

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CC sequence identity to a PRO (secreted and transmembrane protein) cDNA
CC comprising a nucleic acid (a) encoding a PRO polypeptide, or its
CC extracellular domain (with or without its associated signal peptide),
CC which comprises any of the 275 120-850 residue amino acid sequences,
CC given in the specification, (b) comprising any of the 275 300-3500
CC nucleotide sequences, given in the specification; or (c) comprising the
CC full-length coding sequence of the nucleotide sequences given in the
Specification, or of the DNA deposited under any of the American Type
CC Culture Collection (ATCC) Accession Numbers listed in the specification.
CC aniso included are a vector comprising the novel nucleic acid, a host cell
CC comprising the vector, producing a PRO polypeptide, the isolated PRO
CC polypeptide of fused to a heterologous amino acid sequence, an anti-PRO
CC polypeptide, modulating at least one biological activity of a cell
CC expressing a PRO polypeptide, stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, (or proteoglycans from
CC cartilage or cytokine from peripheral blood mononuclear cells (PBMC)),
CC modulating the uptake of glucose or FRA by skeletal muscle cells or
CC cells (or of T-lymphocyte cells, or of endothelial cells), inhibiting the proliferation of inper ear utricular supporting
CC binding of A.peptide to factor VIA, or differentiation of adipocyte
CC cells (or proliferation Erra the amendal and an
CC cells, detecting the prosence of a tumour in a mammal and an
CC including uses as hybridisation probes, in chromosome and gene mapping,
CC including uses as hybridisation probes, in chromosome and gene mapping,
CC including uses as hybridisation probes, in chromosome and gene mapping,
CC including uses as hybridisation probes, in chromosome and gene mapping,
CC including uses as a proper comprised the recent of the proper comprised the recombinant techniques, and in generating either transgenic animals or
CC comprised the recombination of the proper compris
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cytostatic; :
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2001US-00927796

18-JUL 29-JUN-2001; 21-JUN-2001; 22-JUN-2001;

2001WO-US021066. 2001WO-US021735. 2001US-00908827.

knock-out animals which, in turn, as screening of therapeutically useful

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The present sequence is the protein sequence of human BlyS (neutrokine-CC alpha). The invention relates to compositions comprising heterotrimeric complexes of tumour necrosis factor (TNP) ligand family members, and their use in the detection, prevention and treatment of disease. In one CC embodiment, the heterotrimeric complex comprises full-length or CC extracellular portions of BlyS and full-length or extracellular portions of other TNF ligand family members, preferably BLyS-SV. The CC heterotrimeric complexes of the invention are useful for treating an CC autoimmune disease, cancer or osteoporosis, and particularly for CC inhibiting cancer cell proliferation, increasing B cell proliferation or activity comprises administering to an individual having CC an immunodeficiency a heterotrimeric complex including BLyS and APRIL. A Claimed method of treating an autoimmune disease comprises administering CC an antibody that binds a complex of BlyS and APRIL.
                                                                                                                                                                                                                                                                                                                                                                                              Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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host disease (GVHD). The autoimmune disease is systemic lupus erythematosus, rheumatoid arthritis or Sjogren's syndrome. The antibody is useful for detecting, diagnosing, prognosing, treating, preventing or ameliorating a disease or disorder associated with aberrant APRIL or APRIL receptor expression or aberrant function of APRIL or APRIL receptor. The disease or disorders includes autoimmune and inflammatory disorders such as autoimmune neutropenia, haemolytic anaemia, dermatitis, uveitis, tuberculosis, diabetes mellitus, myocarditis, multiple sclerosis, uveitis, tuberculosis, diabetes mellitus, psoriasis, cancer of the immune system, particularly B cell cancers, immune disorders such as myssthenia gravis, Hashimoto's disease, immunodeficiency syndrome, Bruton's disease, infectious disease, immunodeficiency syndrome (AIDS), and proliferative disorders (e.g. acquired immunodeficiency syndrome (AIDS)), and proliferative disorders (e.g. leukemia). The present sequence represents the tumour necrosis factor Blys
                                                                                                                                                                                                                                                                                                                                      The invention relates to a novel antibody or its fragment, which immunospecifically binds tumour necrosis factor Delta (TNF-delta/APRIL). The antibody of the invention has dermatological, immunosuppressive, antiinflammatory, antirheumic, antiarthritic, cytostatic, antianaemic, antiallergic, antiasthmatic, neuroprotective, ophthalmological, tuberculostatic, antidiabetic, antipsoriatic, anti-HTV, antiarteriosclerotic, vasostropic, thyromimmetic, and haemostatic activity. The antibody or its fragment are useful for treating, preventing or ameliorating cancer such as Non-Hodgkin's lymphoma or multiple myeloma in human, disease or disorder such as autoimmune disease, and graft versus bear disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel isolated antibody that immunospecifically binds tumor necrosis factor delta, useful for treating, preventing or ameliorating Non-Hodgkin's lymphoma, multiple myeloma, rheumatoid arthritis or Sjogren's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antipsoriatic; anti-HIV; antiarteriosclerotic; vasotropic; thyromimetic; haemostatic; cancer; autoimmune disease; graft versus host disease; GVHD inflammatory disorder; proliferative disorder; single chain antibody; antibody; human; BlyS; tumour necrosis factor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APRIL; scFv; immunospecific; tumour necrosis factor delta; TNF-delta dermatological; immunosuppressive; antiinfiammatory; antixheumatic; antiarthritic; cytostatic; antianemic; antiallergic; antiasthmatic; neuroprotective; ophthalmological; tuberculostatic; antidiabetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure;
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Matches 285
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N-PSDB;
                                                                                                                                                                                                                                                            The present sequence represents a human TALL-1 polypeptide. The specification describes TACI and BR3 polypeptides. TACI and BR3 are receptors. Tumour necrosis factor (TNF) family ligands TALL-1 and April bind to the TACI receptor, while TNF family ligands TALL-1 also binds to BR3 receptor. The TACI and BR3 receptor nucleic acid is useful for preparing a composition for treating systemic lupus erythematosus
                                                                                                                                                                                                                  Sequence
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                                                                                                             Conservative
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2002US-0377171P
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                                                                                                                                   100.0%;
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                                                                                                       Score 1451; DB 6;
Pred. No. 1.3e-144;
Mismatches 0;
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                      14-SEP 1998
16-SEP 1998
16-SEP 1998
17-SEP 1998
29-OCT 1998
29-OCT 1998
20-NOT 1998
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10-SEP-1998;
14-SEP-1998;
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14-JUL-1998
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98WO-US022991
98WO-US022992
98WO-US025108
98WO-US025108
99WO-US005028
99WO-US005190
99WO-US00615
99WO-US00615
99WO-US0201252
99WO-US020111
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98WO-US019437.
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98WO-US019093.
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98WO-US014552.
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LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP 120
                              PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                                                                                                                                          GEGNSSONSRNKRAVOGPEETVTODCLOLIADSETPTIOKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                                                                                        GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                                                                             KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETI
                                                                                              KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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PRO, Ä protein SEQ IJ 24

Human; secreted protein; transmembrane protein; PRO; inflammatory disease; organ failure; atherosclerosis; cardiac infertility; birth defects; premature aging; AIDS; bicsensor; acquired immunodeficiency syndrome; cancer; diabetic complicat bioreactor; tumour. complication; injury;

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01-MAR-2000

02-MAR-2000

02-MAR-2000

110-MAR-2000

115-MAR-2000

20-MAR-2000

21-MAR-2000

31-MAR-2000

17-MAY-2000

32-MAY-2000

32-MAY-2000

32-MAY-2000

32-MAY-2000

32-MAY-2000

32-MAY-2000

32-MAY-2000

32-MAY-2000
                                                                          20-JUN-2001
21-JUN-2001
22-JUN-2001
29-JUN-2001
09-JUL-2001
18-JUL-2001
06-AUG-2001
09-AUG-2001
19-DEC-2001
                                                                                                                                                                                                                            14 - WAR - 2001;

22 - WAR - 2001;

05 - APR - 2001;

10 - MAY - 2001;

11 - MAY - 2001;

18 - MAY - 2001;

25 - MAY - 2001;

25 - MAY - 2001;

01 - JUN - 2001;

01 - JUN - 2001;

14 - JUN - 2001;

14 - JUN - 2001;

15 - JUN - 2001;

16 - JUN - 2001;

17 - JUN - 2001;

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19 - JUN - 2001;
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20-DEC-2000;
20-DEC-2000;
20-DEC-2000;
28-FEB-2001;
28-FEB-2001;
01-MAR-2001;
09-MAR-2001;
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02-DEC-1999

02-DEC-1999

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16-DEC-1999

20-DEC-1999

20-DEC-1999

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30-DEC-1999

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31-DEC-1999

30-DEC-1999

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31-DE
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10-NOV-2000;
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23-AUG-
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                                                                      2001US-00854280

2001US-00860216

2001US-00866034

2001US-00866034

2001US-0087035

2001US-00872035

2001US-00892636

2001US-00882636

2001US-0088342

2001US-00887879

2001US-00887879

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2000WO-US008439.
2000WO-US013705.
2000WO-US014042.
2000WO-US014941.
2000WO-US015264.
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2000WO-US000376

2000WO-US004341

2000WO-US004342

2000WO-US004414

2000WO-US004914

2000WO-US005004

2000WO-US005601

2000WO-US005841

2000WO-US005841

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2000WO-US005884

2000WO-US007831

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2000WO-US030952
2000WO-US030873
2000WO-US032678
2000WO-US034956
2001US-00796498
2001US-00796498
2001WO-US006520
2001WO-US0066520
2001WO-US006689
2001US-00802706
2001US-00802706
2001US-0081689
2001US-0081689
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2000WO-US022031.
2000WO-US023522.
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99WO-US028551.
99WO-US028564.
99WO-US028565.
99WO-US030095.
99WO-US03011.
99WO-US0301999.
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The invention relates to an isolated nucleic acid comprising, or which is call least 80% identical to, or the full-length coding sequence of, any of the 275 nuclectide sequences, encoding the corresponding PRO polypeptide (one of 275 secreted or transmembrane proteins). The nucleic acid further comprises the full-length coding sequence of the DNA deposited under comprises the full-length coding sequence of the DNA deposited under in the specification. Also included are vectors and host cells for producing PRO proteins, nethods for stimulating the release of the proliferation of comprises factor alpha) from human blood, (and the proliferation of cartilage, proliferation of inner ear urticular supporting cells, the proliferation of cartilage, proliferation of inner ear urticular supporting cells, the proliferation of centracells (pand), a method for modulating the release of a cycokine from cells acid (PFA) by skeletal muscle cells, the release of a cycokine from cells, a method for detecting the presence of a cycokine from cells, a method for detecting the presence of a cycokine from cells, a method for inner cells, the release of a cycokine from cells, a method for inner cells, the release of a cycokine from cells, a method for inner cells, the release of a cycokine from cells, a cells, a method for inhibiting the cells, a certaing cells, a certaing cells, a method for cells and polypeptides are useful for treating cells and an objective cells, a certain cells cells, and cells cells. The present sequence represents a PRO cells are useful for the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim
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DB; ACA04035.
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Similarity

100.0%;

Conservative

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Score 1451; DB 6; Pred. No. 1.3e-144; Mismatches 0;

Indels Length

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Gaps

285

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RESULT 43
ABP57103
ID ABP57

Beresini M, ME, Goddard

Þ

Deforge L, A, Godowski

Desnoyers L, F PJ, Gurney AL,

Filvaroff E, L, Sherwood

ເນ Gao

ABP57103 standard; protein; 285

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The present invention describes a method (M1) for diagnosing rejection in a cardiac transplant patient or predicting the likelihood that a cardiac transplant patient will experience rejection of the transplanted cardiac transplant patient will experience rejection of the transplanted cardiac transplant patient, which is a member of tumour necrosis factor (TNF) superfamily of proteins) in a sample obtained from the patient. Also described is a method (M2) for inhibiting cardiac transplant rejection a involving administering to a patient suffering from the rejection a composition that inhibits BLyS activity. A BLyS inhibitor has composition that inhibits BLyS activity. A BLyS inhibitor has a cardiac transplant patient or predicting the likelihood that a cardiac transplant patient or predicting the likelihood that a cardiac transplant patient or predicting the likelihood that a cardiac transplant patient or predicting the likelihood that a cardiac transplant patient or inhibiting cardiac transplant rejection. Assays of BLyS levels allows an early indication of graft rejection prior to the clinical observation of rejection, and permits early intervention to block rejection. The present sequence represents the membrane bound or reservation sequence, which is given in the exemplification of the
                                                                                                                                                                                                                                           Query Match
Best Local Sim
Matches 285;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Diagnosing rejection in cardiac transplant patient or predicting likelihood that cardiac transplant patient will experience rejection of transplanted cardiac tissue, by assaying BLyS expression level in patient
                                                                                                                                                                                                                                                                                                              Sequence 285 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bednarik DP,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          graft rejection; BLyS inhibitor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Membrane bound BLyS; BLyS; human; B lymphocyte stimulator; TNF; tumour necrosis factor; cardiac transplant rejection; immunosuppressive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-201447/19.
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KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                                                                                                                                   MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                                       GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEB
                                                                                                                LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                            LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                                                           MDDSTEREOSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                 GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
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Pred. No. 1.3e-144;
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13-SEP-1999;
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2002US-00123904

97WO-US005230. 98WO-US012456. 98WO-US014552.

98WO-US017888 98WO-US018824

98WO-US019093

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99WO-US028313. 99WO-US028313. 99WO-US028400

99WO-US021547. 99WO-US023089. 99WO-US028214.

99WO-US020594. 99WO-US020944. 99WO-US021090.

99WO-US005028. 99WO-US005190. 99WO-US008615. 99WO-US010733. 99WO-US012252. 99WO-US020111.

30-086 SD-0886 98WO-US025108. 99WO-US000106.

024855. 022991

Sn-OM86

98WO-US

98WO-US019437. 98WO-US021141.

98WO-US019094 98WO-US019177

98WO-US019330

99WO-US028409. 99WO-US028301. 99WO-US028634. 99WO-US028551. 99WO-US028564. 99WO-US028565. 99WO-US030095. 99WO-US030991. 99WO-US030990.

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                                                                                                                                                                glucose uptake modulator; FFA uptake modulator; cell proliferation stimulator; cell differentiation stimulator; cell differentiation inhibitor; cytokine release stimulator; tumour; lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tum cervical tumour; liver tumour; chromosome mapping; gene mapping;
30-JAN-2003
                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                           Human; secreted and transmembrane protein; Tumour necrosis factor alpha release; Tur-e
                                                                                                                                                                                                                                                                                                                                                                                Novel human
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                                                                                                                                                  therapy; chromosome identification; chromosome marker
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard;
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11-FEB-2000;

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18-FEB-2000;

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21-MAR-2000;
30-MAR-2000;
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Gerritsen
Smith V,
Novel secreted and transmembrane polypeptide for modulating biological activity of cell expressing the polypeptide, identifying agonists or antagonists of polypeptide, and as molecular weight markers.
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19-DEC-
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06-AUG-2001;
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DB; ADA45542.
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ME, Goddard
Stewart TA,
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2000WO-US03328
2000WO-US030952
2000WO-US030952
2000WO-US032678
2000WO-US034956
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2000WO-US007377
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2000WO-US004341
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2001WO-US021066.
2001WO-US021735.
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2001US-00887879
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99WO-US031274.
                                                                                                                           A, Go
Tumas
                                                                                                                          Deforge L, Desnoyers L, Filvaroff E, G
A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
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colls, for stimulating the proliferation of or gene expression in periodic cells, for stimulating the release of proteoglycans from cartilage, for calls, for stimulating the proliferation of inner ear utricular supporting cells, consisting the proliferation of Inner ear utricular supporting cells, consisting the proliferation of Tlymphocyte cells, for stimulating cells, for stimulating proliferation of Tlymphocyte cells, for detecting cells, for stimulating proliferation of endothelial cells, for detecting cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, come useful for isolating genomic and cDNA nucleotide probes crowdisters, colon, breast, colon, brea
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Best Local 9
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Pred. No. 1.3e-144;
; Mismatches 0;
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Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; transmer; adrenal; lung; colon; breast; prostate; rectum; kidn

kidney; tumour;

cervix;

Human PRO polypeptide #12

20-NOV-2003 ADA75974;

(first

entry)

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29-OCT-1998
20-NCV-1998
20-NCV-1998
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98WO-US019437

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98WO-US022991

98WO-US02591

98WO-US025106

99WO-US015190

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99WO-US015191

99WO-US015191

99WO-US0251141

99WO-US0251149

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99WO-US025149

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    17-MAY 2000
12-MAY 2000
22-MAY 2000
23-MAY 2000
24-AUG 2000
24-AUG 2000
24-AUG 2000
20-DEC 2000
20-DEC 2000
20-DEC 2000
21-MAR 2001
28-FEB 2001
29-MAR 2001
21-MAY 2001
21-MAY 2001
25-MAY 2001
25-MAY 2001
25-MAY 2001
25-MAY 2001
25-MAY 2001
25-MAY 2001
21-MAY 2001
21-MAY
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2000WO-US023522.
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2000WO-US033528.
2000WO-US033673.
2000WO-US033674.
2000WO-US034956.
2001WO-US006566.
2001US-00806692.
2001US-00806692.
2001US-00854280.
2001US-00854280.
2001US-00854280.
2001US-008560216.
2001US-00856021.
2001US-00856021.
2001US-00856021.
2001US-00866021.
2001US-00866024.
2001US-0086723.
2001US-00872035.
2001US-0086723.
2001US-00887373.
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2001US-00988342.
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2001US-009388373.
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2000WO-US013705.
2000WO-US014042.
2000WO-US014941.
INC.
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, Beresini M, n ME, Goddard Stewart TA, A, Gc Tumas Deforge L, Desnoyers L, Filvaroff E, G 1, Godowski PJ, Gurney AL, Sherwood S; Numas D, Watanabe CK, Wood WI, Zhang Z; Gao E,

2003-687639/65. DB; ADA75973.

nucleic acid encoding a secreted and transmembrane designated e.g. PRO1114 or PRO4978, useful in chromosome, in generating antisense RNA and DNA, and in gene therapy gene therapy

24; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TWP-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as the proliferating probes, in chromosome and gene mapping, in generating and sused in preparing PRO polypeptides by recombinant techniques and in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a The

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RESULT 46
ADA18624
ID ADA18
AC ADA18
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Best Local S
Matches 285
                                                                                                                                                                                                                                                 Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; blood; chondrocyte cell; lung; colon; breast; prostate; rectum; cervix; liver; tumour; cancer; glucose uptake; FFA; adipocyte cell; pericyte cell; proteoglycan; cartilage; inner ear utricular supporting cell; cytokine; A-peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
  31-MAR-1997;
12-JUN-1998;
                                                           08-MAY-2002; 2002US-00141755
                                                                                                                                                                                                                                cartilage; in factor VIIA;
                                                                                                        20-MAR-2003
                                                                                                                                                US2003054517-A1.
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    97WO-US005230
98WO-US012456
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Pred. No. 1.3e-144;
Mismatches 0;
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        10-MAR-1999;
11-MAR-1999;
20-ARR-1999;
21-ARR-1999;
21-ARR-1999;
21-SEP-1999;
21-SEP-1999;
21-SEP-1999;
21-SEP-1999;
21-DEC-1999;
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24-FEB-2000;
24-FEB-2000;
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21-MAR-2000;
21-MAR-2000;
22-MAY-2000;
21-MAR-2000;
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10-SEP-1998
11-SEP-1998
14-SEP-1998
14-SEP-1998
14-SEP-1998
16-SEP-1998
17-SEP-1998
07-OCT-1998
29-OCT-1998
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01-DEC-1998
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2000WO-US000277.
2000WO-US000376.
2000WO-US003565.
2000WO-US004341.
2000WO-US004342.
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99WO-US005190
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98WO-US024855
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10-MAY-2001; 2
10-MAY-2001; 2
18-MAY-2001; 2
25-MAY-2001; 2
25-MAY-2001; 2
01-JUN-2001; 2
01-JUN-2001; 2
01-JUN-2001; 2
01-JUN-2001; 2
01-JUN-2001; 2
14-JUN-2001; 2
21-JUN-2001; 2
21-JUN-2001; 2
21-JUN-2001; 2
21-JUN-2001; 2
21-JUN-2001; 2
29-JUN-2001; 2
06-JUL-2001; 2
06-JUL-2001; 2
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22-MAR-2001;
05-APR-2001;
10-MAY-2001;
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Smith V,
                                                                                                                                                                                                                                                                                                                                                  09-AUG-2001;
16-AUG-2001;
19-DEC-2001;
                                                                                                                                                                                                                                                              New PRO nucleic acid, useful for preparing a composition for treating
                                                                                                                                                                                                                                                                              N-PSDB; ADA18623.
                                                                                                                                                                                                                                                                                                                    Baker
             seqdata.uspto.gov/sequence.html.
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ME, Goddard
Stewart TA,
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2001US-00828366.
2001US-00828366.
2001US-00854286.
2001US-00860218.
2001US-00866028.
2001US-00866034.
2001US-00874503.
2001US-00874503.
2001US-00874503.
2001US-00874503.
2001US-00874503.
2001US-0087859.
2001US-00887879.
2001US-00887879.
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2001US-0087879.
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Tumas D,
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A, Godowski PJ, Gurney J
Tumas D, Watanabe CK, W
                                                                                                                                                                                                                                    English.
                                                                                                                                                                                                                                                                                                   L, Filvaroff E, G
y AL, Sherwood S;
Wood WI, Zhang Z;
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Ξ

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The invention relates to isolated human PRO polypeptides (secreted and CC transmembrane polypeptides) and the polypucleotides encoding them. The CC invention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis and factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. lung, colon, breast, corrossome and gene mapping, including uses as hybridisation probes, in CC chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO CC polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the CC development and screening of therapeutically useful reagents. The PRO CC polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for modulating the upcake of glucose or repa by adipocyte cells, for stimulating the release of proteoglycans from CC carcilas, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of inner ear utricular colls, for inhibiting the binding of A-peptide to factor VIIA, for polypeptide of the invention. Note: The sequence data for this patent is cerdate uspice of prolegation at the complex colls, for this better the sequence cata for this patent is cerdate uspice. Annul.
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Sequence 285 AA;

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Query Match
Best Local Similarity
Matches 285; Conserv
         100.0%;
 0
          Score 1451; DB 6;
Pred. No. 1.3e-144;
 Mismatches
                     Length 285;
 Indels
 0
 Gaps
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RESULT 47
ADA61247
ID ADA61247
ID ADA61247
AC ADA61
XX DT 20-NO
XX Human
Cell
KW Cell
KW Cell
KW Cell
KW Cell
KW Cell
KW Cerv
KW Gene
OS human
KW Gerv
KW Gene
OS FRO77
XX Secrt
XX Nove
DS 11-AI
DR 114-UJ
DR 114-UJ
DR 114-SI
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Tumour necrosis factor alpha release;
glucose uptake modulator; rPA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inihibitor; cytokine release stimulator; tumour;
lung tumoue; colon tumour; brostate tumour; prostate tumour; rectal tum
cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein.
PRO738.
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                                                                    98WO-US021141.
98WO-US022991.
98WO-US022992.
98WO-US024855.
98WO-US025108.
99WO-US000106.
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98WO-US019093.
98WO-US019094.
98WO-US019177.
98WO-US019330.
98WO-US019337.
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98WO-US014552.
98WO-US017888.
99WO-US005028.
99WO-US005190.
99WO-US008615.
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                                                                                                                                                                                                                                                                                                                                                            CC transmembrane) polypeptides (I). (I) is useful for stimulating the uptake of TNF-alpha from human blood, for modulating the uptake of CC glucose of TNF-alpha from human blood, for modulating the uptake of CC glucose or FPA by skeletal muscle cells or adipocyte cells, for Stimulating the proliferation or differentiation of chondrocyte cells, CC for stimulating the proliferation of inner ear utricular supporting cells, CC cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of inner ear utricular supporting cells, CC for stimulating the proliferation of T-lymphocyte cells, for stimulating cells, for inhibiting the binding of CC alphytide to factor VIIA, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes cells, for identify other processin or molecules involved in binding cells in assays to identify other process or molecules involved in binding cells interaction. A polympetide, for generating transgenic animals or knockout animals which in turn are useful in the development and certain processome dentification, as chromosome marker, and for generating cells, in an accombinant cell culture or natural cell courters. (I) and (II) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO
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Best Local S
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Smith V,
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09-JUL-2001;
18-JUL-2001;
06-AUG-2001;
09-AUG-2001;
16-AUG-2001;
19-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                            Sequence 285
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 12;
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DB; ADA61246.
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KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                        KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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                                                                 GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
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Æ, Goddard
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; 2001WS-US921735.
; 2001US-00908827.
; 2001US-00924419.
; 2001US-00927796.
; 2001US-00931836.
; 2001US-00028072.
                                                                                                                                                                                                                                                                                       Conservative
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ski PJ, Gurney AL, Sherwood S;
Watanabe CK, Wood WI, Zhang Z;
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g cancer.
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15-MAR-2000; 20-MAR-2000; 21-MAR-2000; 30-MAR-2000; 17-MAY-2000; 22-MAY-2000; 30-MAY-2000;

2000WO-US007377, 2000WO-US007532, 2000WO-US008439, 2000WO-US013705, 2000WO-US014042,

2000WO-US004342 2000WO-US004914 2000WO-US005004 2000WO-US005004 2000WO-US005601 2000WO-US005746 2000WO-US005841 2000WO-US006819 2000WO-US006884

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240 240 180 180 120 120 60 60 01-DEC-2000; 20-DEC-2000; 20-DEC-2000;

24-AUG-2000; 08-NOV-2000; 10-NOV-2000;

02-JUN-2000; 28-JUL-2000; 11-AUG-2000; 23-AUG-2000;

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10-MAR-1999;
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98WO-US017888
98WO-US01824
98WO-US019094
98WO-US019177
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99WO-US0081733
99WO-US0081733
99WO-US0081851
99WO-US020594
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26-FEB 2001
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11-MAR
                                                       Novel secreted and transmembrane PRO the release of tumor necrosis factor a tumor in a mammal.
                                                                                                                                                      Baker KP, Beresini M,
Gerritsen ME, Goddard
Smith V, Stewart TA,
    The invention describes 305 nucleic acids encoding PRO
                               Claim
                                                                                                                 WPI; 2003-695927/66.
N-PSDB; ADB19031.
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                             12; Fig
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                             24; 660pp; English.
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A, Godowski PJ, Gurney
Tumas D, Watanabe CK, W
                                                                       polypeptides useful alpha and detecting
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Wood WI,
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AL, Sherwood S;
Zhang Z;
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Matches 285;
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01-DEC-2000;
19-DEC-2001;
                                                                                               Gerritsen I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; advenal; lung; colon; breast; prostatte; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FPA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; heemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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                     WPI; 2003-765415/72
N-PSDB; ADB27572.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
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1 ME, Goddard
Stewart TA,
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A, Godowski PJ, Gurney AL,
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Pred. No. 1.3e-144;
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L, Sherwood
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New PRO nucleic acid, useful for preparing a composition e.g., tumor or for tissue typing. for treating

Content of the presence of a tumour in a mannal ploof, a method for colon, breast, presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prestate, rectal, kidney, cervical and liver tumours). The colon, breast, prestate, rectal, kidney, cervical and liver tumours). The colon, breast, prestate, rectal, kidney, cervical and liver tumours). The colon, breast, prestate, rectal, kidney, cervical and liver tumours). The colon, breast, prestate, rectal, kidney, cervical and liver tumours). The colon, breast, presented and sene mapping, in generating cantisense RNA and DNA and in molecular biology, including uses as comply preparating and preparating and preparating pRD polypeptides by recombinant techniques and in colon settle in the development and screening of therapeutically useful creating the proparating a condition responsive to the polypeptides or medicament for treating a condition responsive to the polypeptides or cantibodies, such as tumours, for stimulating and inhibiting proliferation of polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation colon sexpression in pericyte cells, for stimulating the uptake of colons or FPA by skeletal muscle cells or adipocyte cells, for stimulating the uptake of cells, for inducing endothelial cell tube formation and for treating coliferation of or gene expression in pericyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation and for treating coliferation and for treating colons and for treating colons are also useful for treating such as sports injuries and carticular cartilage defects, osteoarthritis and rheumation arthritis. PRO colons are also useful for treating sports-related joint problems, colons are also useful for treating sports related joint problems, colons and conditions which may benefit from enhanced local immune system cell infiltration. This sequence and colons and for the invention. Note: The sequence data for this patent is also available in The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for

Sequence 285 ₽¥,

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PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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Pred. No. 1.3
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RESULT 50 ADA86052 ADA86052 standard; protein;

ADA86052;

BXAXB 20-NOV-2003

(first entry)

Novel human

secreted

and transmembrane protein

PRO738

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The invention describes 305 nucleic acids encoding PRO (secreted and CC transmembrane) polypeptides (I). (I) is useful for stimulating the collection of TNF-alpha from human blood, for modulating the uptake of CC glucose or PFA by skeletal muscle cells or adipocyte cells, for Stimulating the proliferation or differentiation of chondrocyte cells, for collection of stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of Tymphocyte cells, for stimulating the proliferation of Flymphocyte cells, for stimulating the proliferation of routerlycans from cartilage, for for stimulating the proliferation of Flymphocyte cells, for detecting the release of a cytokine from PBMC cells, for inhibiting the binding of the prelease of a cytokine from PBMC cells, for inhibiting the binding of the presence of tumour in a mammal. The tumour is lung, colon, breast, for stimulating proliferation of endothelial cells, for detecting the prostate, rectal, cervical or liver tumour. The oligonucleotide probes or are useful for isolating genomic and cDNA nucleotide sequences or constants are useful for isolating genomic and cDNA nucleotide sequences or constant and polymcleotide (II) encoding (I) is useful in chromosome and cDNA proliferation of antisense RNA and DNA, in the corresponding of therapeutically useful as therapeutic agent. PRO is useful in the development and constant animals which in turn are useful in the development and constant purished the expression in specific cells, tissues or serum, and for chromosome identification, as chromosome marker, and for generating probes. (I) and (II) are useful for tissue typing. This is the amino collopetide. (I) and useful for massembrane PRO collopetide.
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Gerritsen ME, Goddard
Smith V, Stewart TA,
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N-PSDB; ADA66051.
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25-AUG-1999; 99US-00380137.
30-MAR-2000; 2000WC-US008439.
01-DEC-2000; 2000WC-US032678.
19-DEC-2001; 2001US-00028072.
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02-JUN-1999;
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99WO-US012252.
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Tumas D,
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A, Godowski PJ, Gurney.
Tumas D, Watanabe CK, W
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Wood WI, Zhang Z;
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L, Sherwood S;
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Sequence 285

A

New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide, and for manufacturing a medicament for diagnosing or treating tumor.

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RESULT 51
ADB15616
ID ADB15616
ID ADB15616
ID ADB15
XX ADB16
IT CONCLUDE
IT CONCLUD

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Best Local Sim
Matches 285;
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02-JUN-1999;
25-AUG-1999;
30-MAR-2000;
01-DEC-2000;
19-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; phemmatoid arthritis; haemoglobin-associated disorder thalassaemia;
                                                                           N-PSDB;
                                                                                                                                                     Baker KP, Beresini M,
Gerritsen ME, Goddard
Smith V, Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-MAY-2003
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Conservative (
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2000WO-US032678
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99WO-US012252.
99US-00380137.
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Tumas
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A, Godowski PJ, Gurney AL, Sh
Tumas D, Watanabe CK, Wood WI
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Pred. No. 1.3e-144;
); Mismatches 0;
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                                                                                                                                                                                                          Filvaroff
                                                                                                                                               lvaroff E, ya. Sherwood S; zhang Z;
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Claim
Fig
637pp;
 English
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CC transmembrane polypeptides) and the polymucleotides encoding them. The cinvention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis (C polypeptide), a method for stimulating the release of tumour necrosis (C polypeptide), a method for stimulating the release of tumour necrosis (C proliferation or differentiation of chondrocyte cells and a method for C detecting the presence of a tumour in a mammal (e.g. adrenal, lung, CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The C polymucleotides are useful in molecular biology, including uses as C hybridisation probes, in chromosome and gene mapping, in generating C proliferating PRO polypeptides by recombinant techniques and in C generating either transgenic animals or knock-out animals which are C useful in the development and screening of therapeutically useful C responsits. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of C glucose or PRA by skeletal muscle cells, for modulating the uptake of C glucose or PRA by skeletal muscle cells, for modulating the uptake of C glucose or PRA by skeletal muscle cells, for modulating the proliferation of or gene expression in pericyte cells, for stimulating C cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and C arthritis. PRO polypeptides which stimulate the release of proteoglycans C polypeptides are also useful for treating sports-related joint problems, PRO polypeptides are such as serious thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence atta for this patent is also available in electronic format from USPTO at segdata.uspto.gov/sequence.html. The invention relates to isolated human PRO polypeptides (secreted

Sequence 285 AA;

08-MAR-1999; 10-MAR-1999; 20-APR-1999; 14-MAY-1999; 02-UUN-1999; 01-SEP-1999; 08-SEP-1999; 13-SEP-1999;

99WO-US005190. 99WO-US008615. 99WO-US010733.

99WO-US012252

99WO-US005028

15-SEP-1 15-SEP-1 05-OCT-1 29-NOV-1

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99WO-US021090 99WO-US020111 99WO-US020594

99WO-US020944

99WO-US028214

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                                                                                                                                                                                                                                                                 Similarity
                                                                                                                  GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPT1QKGSYTFVFWLLSFKRGSALEE
                                                                KENKILVKETGYFFIYGQVLYTDKTYAMCHLIQRKKVHVFGDBLSLVTLFRCIQNMPETL
                                                                                                GEGNSSQNSRNKRAVQGÞEETVTQDCLQLÍADSETÞTÍQKGSYTFVÞWLLSFKRGSALEE
                                                                                                                                                  LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
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                                                                                                                                                                                                    MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
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                    PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                 KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                    100.0%; 5
100.0%; 1
tive 0;
                                                                                                                                                                                                                                                    Score 1451;
Pred. No. 1.3
0; Mismatches
                                                                                                                                                                                                                                                     DB 6;
L.3e-144;
es 0;
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30-NOV-1999; 01-DEC-1999; 01-DEC-1999; 02-DEC-1999; 02-DEC-1999; 02-DEC-1999; 16-DEC-1999; 20-DEC-1999; 20-DEC-1999; 30-DEC-1999; 30-DEC-1999;

-OM66

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RESULT 52
ADA47402
ID ADA47
XX
AC ADA47
XX
AC ADA47
XX
DT 20-NC
XX
DE Human

ADA47402;

ADA47402 standard;

protein;

285

A

05-JAN-2000; 06-JAN-2000; 06-JAN-2000; 11-FEB-2000; 11-FEB-2000; 18-FEB-2000; 22-FEB-2000; 24-FEB-2000; 24-FEB-2000; 01-MAR-2000; 02-MAR-2000;

99WO-US031274. 99WO-US031274. 2000WO-US000219. 2000WO-US000277. 2000WO-US000376.

99WO-US030999. 99WO-US030720. 99WO-US031243.

Human PRO polypeptide #12

(first entry)

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Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; sports injury; hemosphotom-associated disorder thalassaemia; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
                                                                                                                                                                                                                                                                                                                                                                                  16-SEP-1998;
17-SEP-1998;
07-OCT-1998;
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01-DEC-
05-JAN-
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14-SEP-1998;
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12-JUN-1998;
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25-MAY-2001;

01-JUN-2001;

01-JUN-2001;

05-JUN-2001;

19-JUN-2001;

20-JUN-2001;

21-JUN-2001;

22-JUN-2001;

22-JUN-2001;

22-JUN-2001;

22-JUN-2001;

23-JUN-2001;

29-JUN-2001;

20-AUG-2001;

20-AUG-2001;

219-DEC-2001;

219-DEC-2001;
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15-MAR-2000

20-MAR-2000

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31-MAY-2000

17-MAY-2000

22-JUN-2000

22-JUN-2000

23-MAY-2000

24-AUG-2000

24-AUG-2000

24-AUG-2000

24-AUG-2000

20-DEC-2000

10-NOV-2000

10-NOV-2000

10-MAY-2001

28-EBB-2001

28-EBB-2001

28-EBB-2001

29-MAR-2001

11-MAR-2001

11-MAY-2001

11-MAY-2001
The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating
                                                                                                                                                                                                  New secreted and transmembrane PRO polypeptides and in gene therapy, detecting the presence of tumor in modulating the uptake of glucose or free fatty acid cells or adipocyte cells.
                                                                                                                                                                          Claim
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DB; ADA47401.
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ME, Goddard
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2000WC-US030952
2000WC-US030953
2000WC-US030873
2000WC-US032678
2001WC-US0366620
2001WC-US0066620
2001US-00802706
2001US-00854208
2001US-00854280
2001US-00854280
2001US-00854280
2001US-00860216
2001US-00874203
2001US-00874503
2001US-00886342
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2000WO-US014042.
2000WO-US014941.
2000WO-US015264.
2000WO-US020710.
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2000WO-US006884.
2000WO-US007377.
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Tumas
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as D, Watanabe
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L, Sherwood S
ood WI, Zhang
                                                                                                                                                                                                               nucleic acids, useful a mammal, or by skeletal muscle
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CC antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in CC generating either transgenic animals or knock-out animals which are CC useful in the development and screening of therapeutically useful CC reagents. The PRO polypeptides or antibodies are used in preparing a CC medicament for treating a condition responsive to the polypeptides or CC antibodies, such as tumours, for stimulating and inhibiting proliferation of fundamental muscle cells, for modulating the uptake of CC glucose or FFA by skeletal muscle cells, for modulating the uptake of CC glucose or FFA by skeletal muscle cells, for stimulating CC stimulating differentiation of adipocyte cells, for stimulating CC proliferation of or gene expression in pericyte cells, for treating CC cells, for inducing endothelial cell tube formation and for treating CC various bone and/or cartilage disorders such as sports injuries and CC articular cartilage defects which stimulate the release of proteoglycans from cartilage affects often articular cartilage affects often articular cartilage affects of construction and for treating CC polypeptides are also useful for treating sports related joint problems, CC associated disorders such as various thalassaemals and conditions which may benefit from enhanced local immune system cell infiltration. Note: The sequence data for this patent is also available in electronic format from CC usero.
                                                                          Matches
                                                                                                  Query Match
Best Local
                                                                       285;
                     Н
                                                                                                     Similarity
MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
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                                                                       100.0%; ilarity 100.0%; Conservative
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                                                                       0;
                                                                     Score 1451; DB 6;
Pred. No. 1.3e-144;
Mismatches 0;
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Вþ Ş 먕 Ş 밁 Ś 밁 Ş 밁 Ş 241 181 121 121 181 61 13 1-4 KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL GEGNSSQNSRNKRAVQGDEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL GEGNSSONSRNKRAVOGPEETVTODCLOLIADSETPTIOKGSYTFVPWLLSFKRGSALEE MDDSTEREOSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCI QNMPETL 240 120 180 120 60

RESULT 53
ADA67197
ID ADA67
XX ADA67
XX ADA67
XX DT 20-NC
XX Humar
XX Humar
XX Cance
KW tumou
Cance
KW teller
KW sheler
KW sheler ADA67197; 20-NOV-2003 ADA67197 PRO standard; polypeptide (first entry) protein; #12. 285

Σ

Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tucancer; adrenal; lung; colon; breast; prostate; rectum; kidne liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disports injury; proteoglycan; articular cartilage defect; osterneumscoid arthritis; haemoglobin-associated disorder thalass system kidney; osteoarthritis; disorder; tumour; cervix;

sapiens

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2001US-009988379
2001US-009988379
2001US-009988375
2001US-009988375
2001US-009988375
2001US-009988375
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(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge Gerritsen ME, Goddard A, Godov Smith V, Stewart TA, Tumas D, Deforge L, Desnoyers L, Filva A, Godowski PJ, Gurney AL, Sho Tumas D, Watanabe CK, Wood WI, Filvaroff E, G L, Sherwood S; od WI, Zhang Z; Gao Σ,

WPI; 2003-695926/66. N-PSDB; ADA67196.

Novel isolated PRO secreted and transmembrane polypeptides useful for stimulating the release of tumor necrosis factor-alpha from human blood and detecting the presence of a tumor in a mammal.

Claim 12; Fig 24; 660pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The C invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis of factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as thy polynucleotides are useful in molecular biology, including uses as this case of the polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful creagents. The PRO polypeptides or antibodies are used in preparing a comedicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of collisteration of or gene expression in periotyte cells, for stimulating cells or dipocyte cells, for inducing endothelial cells or adipocyte cells, for stimulating cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating cells or antiphocyte cells, for stimulating cells or adipocyte cells.

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RESULT 54
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Matches 285
31-MAR-1997;
12-JUN-1998;
14-JUL-1998;
28-AUG-1998;
10-SEP-1998;
14-SEP-1998;
14-SEP-1998;
                                                                                                                                                                                                                                                       Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cerviver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthr; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from USPTO at seqdata.uspto.gov/sequence.html.
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                                                                                                                      15-APR-2002;
                                                                                                                                                     10-APR-2003
                                                                                                                                                                                  US2003068794-A1
                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                   Human
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97WO-US005230.
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98WO-US017888.
98WO-US018824.
98WO-US019093.
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Pred. No. 1.3e-144;
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98WO-US019437.
98WO-US021141.
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98WO-US024855
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The invention relates to isolated human PRO polypeptides (secreted and C transmembrane polypeptides) and the polymuclectides encoding them. The cinvention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis C factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, C colon, breast, prostate, rectal, kidney, cervical and liver tumours). The C polymuclectides are useful in molecular biology, including uses as C phytidisation probes, in chromosome and gene mapping, in generating C antisense RNA and DNA and in gene therapy. The polymuclectides may also be used in preparing PRO polypeptides by recombinant techniques and in C generating either transgenic animals or knock-out animals which are C useful in the development and screening of therapeutically useful c reagenst for treating a condition responsive to the polypeptides or C antibodies, such as tumours, for stimulating and inhibiting proliferation of gene expression in pericyte cells, for stimulating the putake of C glucose or PRA by skeletal muscle cells or T stimulating for stimulating c the proliferation of or gene expression in pericyte cells, for stimulating the putake of C proliferation of or gene expression in pericyte cells, for stimulating the putake of c proliferation of or gene expression in pericyte cells, for stimulating c repoliferation of inner ear uricular supporting cells of T symphocyte cells, for inducing endothelial cell tube formation and for treating c articles are also useful for treating such as sports injuries and c articles are also useful for treating such as sports injuries and conditions which c associated discreders such as various thalassaemias and conditions which c associated discreders such as various thalassaemias and conditions which c associated discreders such as sports injuries. PRO polypeptides are also useful for treating various mammalian haemoglobin. The sequence data for th
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Smith V,
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                                                    sequence represents
sequence data for the
the USPTO website at
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16-AUG-2001;
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ME, Goddard
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Tumas
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A, Godowski PJ, Gurney AL, Sherwood S;
Fumas D, Watanabe CK, Wood WI, Zhang Z;
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G D
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Query Match Best Local

Similarity

Score Pred.

1451; No. 1

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transmembrane) polypeptides (I). (I) is useful for stimulating the release of TWF-alpha from human blood, for modulating the uptake glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation of cells.

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N-PSDB;
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01-DEC-2000;
19-DEC-2001;
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Gerritsen ME, Go
Smith V, Stewart
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                                                                                                                                  Claim
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Æ, Goddard
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Tumas
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A, Godowski PJ, Gurney AL,
Tumas D, Watanabe CK, Wood
                                                                                                                                English
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Best Local (
                Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour cancer; adrenal; lung; colon; breast; proseate; rectum; kidney; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; Tlymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disord sports injury; proteoglycan; articular cartilage defect; osteoar rheumatoid arthritis; haemoglobin-associated disorder thalassaem immune system cell infiltration.
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100.0%; Pred. No. 1.3e-144;
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LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP

MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC

MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC

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Query Match Best Local S

Similarity

100.0%; ilarity 100.0%; Conservative

Score 1451; DB 6; Pred. No. 1.3e-144; Mismatches 0;

Length Indels

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The invention relates to isolated human PRO polypeptides (secreted and currents) relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis considerable, a method for stimulating the release of tumour necrosis consideration or differentiation of chondrocyte cells and a method for colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and penerating colon, breast, prostate, rectal, kidney, cervical and a method for colon, breast, prostate, rectal, kidney, cervical and a method for certal molecular biology, including user and in molecular biology, including user and in choose and penerating and in chromosome and gene mapping, in generating a colon, breating propertides or antibodies are used in preparing a colon propertide of the polypeptides or antibodies are used in preparing a colon propertide of the polypeptides or cantibodies are used in preparing a colon propertide of the polypeptides of cells, for modulating the uptake of colons and minimal propertides and propertides and propertides and propertides and colon problems, for stimulating and the proliferation of or gene expression in pericyte cells, for stimulating cells or T-lymphocyte cells, for treating sports related joint problems, the proliferation of propertides which stimulate the release of proteoglycans of the propertides and colon pro
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01-DEC-2000;
19-DEC-2001;
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N-PSDB; ADA96711.
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Smith V, Stev
Sequence
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A, Godowski PJ, Gurney
Lumas D, Watanabe CK, W
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Wood WI,
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11-SEP-1999
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98WO-US019177

98WO-US019437

98WO-US021141

98WO-US022991

98WO-US0224855

98WO-US02050106

99WO-US005028

99WO-US005190

99WO-US005190

99WO-US010733

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99WO-US020114

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Gerritsen Smith V,

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Goddard art TA,

A, Go Tumas

Godowski PJ, 'n

Watanabe CK,

WPI; 2003-755116/71.

Claim 12; Fig

24; 659pp; English.

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The invention relates to isolated human PRO polypeptides (secreted and CC transmembrane polypeptides) and the polynuclectides encoding them. The CC invention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, cry detecting the presence of a tumour in a mammal (e.g. adrenal, lung, cry colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polynucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating and in preparing PRO polypeptides by recombinant techniques and in CC generating either transgenic animals or knock-out animals which are CC useful in the development and screening of therapeutically useful creating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of common microvascular endothelial cells of the polypeptides or cc stimulating differentiation of adipocyte cells, for stimulating the uptake of CC plusose or PRA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation of inner ear utricular supporting cells of Tlymphocyte cells, for inducing endothelial cell tube formation and for treating cells, for stimulating the proliferation of inner ear utricular supporting cells or Tlymphocyte cells, for inducing endothelial cell tube formation and for treating carticles bone and/or cartilage disorders such as sports injuries and conditions bone and/or cartilage disorders such as sports injuries and cell proliferation of inner ear utricular supporting cells or Tlymphocyte cells, for stimulating the proliferation of inner ear utricular supporting cells or Tlymphocyte cells, for stimulating the proliferation of one central kidney disorders such as sports injuries and conditions which masses and conditions which masses ar
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                                          PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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e CK, Wood WI, Zhang Z;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
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    RESULT 58
ADA87155
                                                                                                                                                                                                                 30-NOV-1999;
01-DEC-1999;
01-DEC-1999;
02-DEC-1999;
02-DEC-1999;
                                                                                                                                                                                                                                                                                                                  01-SEP-1999
13-SEP-1999
15-SEP-1999
15-SEP-1999
15-SEP-1999
05-OCT-1999
29-NOV-1999
30-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; secreted and transmembrane protein; PRO; Punour necrosis factor alpha release; PNF-alpha release; glucose uptake modulator; FPA uptake modulator; cell proliferation stimulator; cell differentiation stimulator; cell differentiation stimulator; cell differentiation timbibitor; cytokine release stimulator; tumo tumoue; colon tumour; breast tumour; prostate tumour; rectal cervical tumour; liver tumour; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-MAR-1999
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07-OCT-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-JUN-1998
14-JUL-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human secreted and transmembrane protein PRO738
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99WO-US021547
99WO-US023089
99WO-US028313
99WO-US028313
99WO-US028301
99WO-US028301
99WO-US028564
99WO-US028564
99WO-US028564
99WO-US0308565
99WO-US030911
99WO-US030911
99WO-US030720
99WO-US030911
99WO-US030556
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99WO-US005190
2000WO-US006319
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99WO-US020594.
99WO-US020944.
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99WO-US012252
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98WO-US019437
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98WO-US019177
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241 241 181 181 121 121 61 61

GEGNSSQNSRNKRAVQGPEETVTQDCI

<u>OLIADSETPT</u>

Query Match Best Local S Matches 285

Similarity

100.0%; Score 1451; DB 6; 100.0%; Pred. No. 1.3e-144; tive 0; Mismatches 0;

285;

Conservative

μ

Sequence

285

AA;

seqdata.uspto.gov/sequence.html

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10-NOV-2000

01-DEC-2000

20-DEC-2000

20-DEC-2000

20-DEC-2000

20-DEC-2000

20-DEC-2000

20-DEC-2000

12-FAR-2001

14-MAR-2001

14-MAR-2001

10-MAY-2001

10-MAY-2001

11-MAY-2001

12-FARY-2001

12-FARY-2001

12-MAY-2001

12-MAY-2001

11-UN-2001

11-UN-2001
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24-AUG-2000;
08-NOV-2000;
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01-MAR-2000;

02-MAR-2000;

15-MAR-2000;

20-MAR-2000;

21-MAR-2000;

21-MAR-2000;

31-MAR-2000;

31-MAR-2000;

31-MAR-2000;

31-MAR-2000;
The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the release of TNF-alpha from human blood, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation of chondrocyte cells.
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11-AUG-2000;
                                                                                                                 Claim
                                                                                                                                                                        New
                                                                                                                                                                                                                                                                Smith
                                                                                                                                                                                                                                                                                 Gerritsen
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                                                                                                                                                  diagnosing
                                                                                                                                                                                                                              WPI;
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                                                                                                                                                                      nucleic acid, useful
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ME, Godda
                                                                                                               Fig
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2000WO-US03328
2000WO-US03328
2000WO-US033673
2000WO-US034956
2001WO-US006520
2001WO-US006520
2001US-0080669
2001US-0080669
2001US-00854280
2001US-00854280
2001US-008660216
2001US-008660216
2001US-008660216
2001US-00860216
2001US-00860216
2001US-00860216
2001US-00860216
2001US-00860216
2001US-00860216
2001US-00860216
2001US-00874503
2001US-00874503
2001US-008974503
2001US-008974503
2001US-008974796
2001US-008974796
2001US-008974796
2001US-0099887479
2001US-009988779
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2000WO-US007532.

2000WO-US008439.

2000WO-US013705.

2000WO-US014042.

2000WO-US014941.

2000WO-US015264.

2000WO-US015264.

2000WO-US0152631.
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2000WO-US005841
2000WO-US006884
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Godowski PJ, Gurney /
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L, Sherwood S;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 285;
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Best Local (
                                   Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tucancer; adrenal; lung; colon; breast; prostate; rectum; kidne liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disports injury; proteoglycan; articular cartilage defect; oste sports injury; haemoglobin-associated disorder thalass
                                                                                                                                                                                                                                      Human PRO polypeptide #12.
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                                                                                                                                                                                                                                                                                                                                                          standard; protein;
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                          s; haemoglobin-associated infiltration.
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Pred. No. 1.3e-144;
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                                           ct; osteoarthritis; thalassaemia;
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                                                                                                                                                               kidney;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 285;
                                                                                       disorder;
                                                                                                                                                                                      tumour;
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US2003087349-A1.

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CY
The invention relates to isolated human PRO polypeptides (secreted and convention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis of factor-alpha (TWP-alpha) from human blood, a method for stimulating the release of tumour necrosis of detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and penerating the polypeides are used in preparing PRO polypeptides by recombinant techniques and in generating extending the development and screening of therapeutically useful useful in the development and screening of therapeutically useful cally peptides or antibodies are used in preparing a condition responsive to the polypeptides or the proliferation of creating a condition responsive to the polypeptides or stimulating and inhibiting proliferation of gene expression in pericyte cells, for stimulating cells, for stimulating colliferation of or gene expression in pericyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating cells, for stimulating cells or T-lymphocyte cells, for stimulating endocthelial cell tube formation and for treating trations bone and/or cartilage disorders such as supporting and for treating cells, for stimulating cells, for stimulating the protecolycans of protecolycans are also useful for treating sports-related joint problems, cells, for stimulating protecolycans of protecolycans which are protecolyca
Query Match
Best Local S
Matches 285
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02-JUN-1999; 99WO-US012252.
25-AUG-1999; 99US-00380137.
02-MAR-2000; 2000WO-US005841.
01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
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                                                                             Sequence
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                                                                             285
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ME, Goddard
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                    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     useful for preparing a recombinant PRO polypeptide, a medicament for diagnosing or treating tumor.
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Tumas D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Deforge L, Desnoyers L,
A, Godowski PJ, Gurney
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                English.
Score 1451; DB 6;
Pred. No. 1.3e-144;
; Mismatches 0;
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                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          lvaroff E,
Sherwood S;
                                         285;
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RESULT 60
ADA91449
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Tumour necrosis factor alpha release; TNF-alpha release;
glucose uptake modulator; FFA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumour;
lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
cervical tumour; liver tumour; chromosome mapping;
gene therapy; chromosome identification; chromosome marker.
The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the release of TNF-alpha from human blood, for modulating the uptake of glucose or FRA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation or chondrocyte cells, for stimulating the proliferation or of gene expression in pericyte cells, for stimulating the release of proteoglycans from cartilage, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of Tlymphocyte cells, for stimulating the binding of the release of a cytokine from PBMC cells, for inhibiting the binding of A. peptide to factor VIIA, for inhibiting the differentiation of adipocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-MAR-2000; 2000US-0187202P.
01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
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N-PSDB; ADA91448.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Beresini M, Deforge
ME, Goddard A, Godow
Stewart TA, Tumas D,
                                                                                                                                                                                                                                                                                                             Fig 24; 637pp;
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                                                                                                                                                                                                                                                                                                                                                                                          acid,
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                                                                                                                                                                                                                                                                                                                                                                treating
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A, Godowski PJ, Gurney AL, She
""" """ Mood WI,
                                                                                                                                                                                                                                                                                                                English.
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g e.g., tumor '
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                                                                                                                                                                                                                                                                                                                                                                  recombinant PRO polypeptide, for tissue typing.
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AL, Sherwood S;
Zhang Z;
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RESULT 61
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                                                                                                                                                                                                                Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; carrilage disorder; sports injury; proteoglycan; articular carrilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
                                                                                                                                                                 Homo sapiens
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Pred. No. 1
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121 GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE

180

120 120

LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP MDDSTEREOSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC

LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP

Matches Query Match Best Local :

285;

n 100.0%; Similarity 100.0%; 35; Conservative

.0%;

Score 1451; Pred. No. 1.3 0; Mismatches

DB 6; 0

Length Indels

0

Gaps

60

60

Sequence

285

AA;

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The invention relates to isolated human PRO polypeptides (secreted and C transmembrane polypeptides) and the polynucleotides encoding them. The C invention also relates to an antibody which specifically binds to a PRO C polypeptide, a method for stimulating the release of tumour necrosis C factor-alpha (TWP-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, C colon, breast, prostate, rectal, kidney, cervical and liver tumours). The C polymucleotides are useful in molecular biology, including uses as C antisense RNA and DNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are cused in preparing PRO polypeptides by recombinant techniques and in C generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful c reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or stimulating a condition responsive to the polypeptides or Stimulating a condition responsive to the polypeptides of Stimulating C antification of or gene expression in pericyte cells, for stimulating problems, so the proliferation of or gene expression in pericyte cells, for stimulating c proditieration of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating c articular cartilage are useful for treating sports related joint problems, to articular cartilage and seful for treating sports related joint problems, cartilage are also useful for treating various mammalian haemoglobin-may benefit from enhanced local immune system cell infiltration. This sequence data for this patent is also available in electronic format from useful conditions which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUN-1998;
02-JUN-1999;
25-AUG-1999;
30-NOV-1999;
01-DEC-2000;
19-DEC-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New PRO nucleic acid, useful for manufacturing a medicament for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-APR-2002;
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DB; ADB14511.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     or treating tumor.
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ME, Goddard
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99WO-US012252.
99US-00380137.
99WO-US028313.
2000WO-US032678.
2000US-00028072.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Deforge L, Desnoyers L, F
A, Godowski PJ, Gurney AL,
Tumas D, Watanabe CK, Wood
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sherwood S;
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08-SEP-1999

13-SEP-1999

15-SEP-1999

15-SEP-1999

05-OCT-1999

05-OCV-1999

30-NOV-1999

30-NOV-1999

01-DEC-1999

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02-DEC-1999

16-DEC-1999

16-DEC-1999

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16-DEC-1999

16-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; secreted and transmembrane protein; PRO; Tumour necrosis factor alpha release; TNF-alpha release; glucose uptake modulator; FFA uptake modulator; cell proliferation stimulator; cell differentiation stimulator; cell differentiation timulator; cell differentiation timulator; cell differentiation timulator; cell differentiation timulator; cytokine releas.
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14-MAY-1999
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16-SEP-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard; protein;
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99WO-US000106.
99WO-US0005028.
99WO-US005190.
99WO-US010733.
99WO-US012752.
99WO-US020111.
99WO-US020594.
99WO-US02094.
99WO-US0204.
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98WO-US019093.
98WO-US019094.
98WO-US019177.
98WO-US019330.
98WO-US019437.
99WO-US028314
99WO-US028313
99WO-US028313
99WO-US028409
99WO-US028301
99WO-US028551
99WO-US028564
99WO-US028565
99WO-US030999
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98WO-US022991.
98WO-US022992.
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98WO-US017888
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98WO-US012456
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      17-MAY 2000
27-MAY 2000
28-JUN 2000
28-JUN 2000
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21-AUG 2000
22-DEC 2000
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20-DEC 2000
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22-FEB-2000
24-FEB-2000
24-FEB-2000
02-MAR-2000
02-MAR-2000
02-MAR-2000
110-MAR-2000
15-MAR-2000
21-MAR-2000
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06-JAN-2000;
06-JAN-2000;
11-FEB-2000;
18-FEB-2000;
                                                                                                                      Baker KP,
Gerritsen
Smith V,
    New isolated nucleic acid and encoded PRO polypeptide, are useful in the diagnosis and treatment of cancer.
                                                             WPI; 2003-695954/66.
N-PSDB; ADB18472.
                                                                                                                                                                                                      (GETH ) GENENTECH INC.
                                                                                                                      Beresini M,
n ME, Goddard
Stewart TA,
                                                                                                                                                                                                                                            2000WO-US023322
2000WO-US023322
2000WO-US0233287
2000WO-US033673
2000WO-US032678
2000WO-US032678
2000WO-US032678
2000WO-US032678
2000WO-US006520
2001WO-US006520
2001WS-00802706
2001WS-00828689
2001US-00854208
2001US-00854208
2001US-00854208
2001US-00854208
2001US-00866024
2001US-00866024
2001US-00866028
2001US-00874503
2001US-00974419
2001US-00931836
2001US-00931836
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2000WO-US008439.
2000WO-US013705.
2000WO-US014042.
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2000WO-US005004.
2000WO-US005601.
2000WO-US00561.
2000WO-US005841.
2000WO-US00684.
2000WO-US0068319.
2000WO-US0068777.
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2000WO-US015264.
2000WO-US020710.
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99WO-US031243.
99WO-US031274.
                                                                                                                      1 A, Godow
Tumas D,
                                                                                                                        Deforge L, Desnoyers L, F:
A, Godowski PJ, Gurney AL,
Tumas D, Watanabe CK, Wood
                                                                                                                        Filvaroff E, Ga
AL, Sherwood S;
cod WI, Zhang Z;
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RESULT 63
ADA93688
ID ADA93
XX ADA93
XX ADA93
XX DT 20-NO
XX Human
XX Human
XX Human
XX Human
XX Human
XX Encle
XW Incer
XW Sport
XW Sport
XW Sport
XW Endot
XW Inmun
XX Inmun
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Best Local S
Matches 285
        Gerritsen Smith V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; pericyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; presented arthritis; hamoglobin-associated disorder thalassaemia;
                                                                                                                                                                   03-MAR-2000; 2000US-0187202P
01-DEC-2000; 2000WO-US032678
19-DEC-2001; 2001US-00028072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the release of TNF-alpha from human blood, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyt
                                                                                                                                                                                                                                                                                                                                      24-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADA93688 standard; protein;
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        , Beresini M,
n ME, Goddard ,
Stewart TA,
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- Waranabe CK, Wood WI,
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WPI; 2003-755077/71.
N-PSDB; ADA93687.
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New isolated, secreted and transmembrane PRO nucleic acid, useful for diagnosis, prevention and/or treatment of tumors, such as lung, colon, breast, prostate, rectal, cervical and/or liver tumors. rectal,

Claim 12; Fig 24; 637pp; English.

The invention relates to isolated human PRO polypeptides (secreted and Ctransmembrane polypeptides) and the polypucleotides encoding them. The Cransmembrane polypeptides analtibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis C factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polynucleotides are useful in molecular biology, including uses as considered the property of the polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful cragents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FRA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for stimulating cells or gene expression in pericyte cells, for stimulating cells or T-lymphocyte cells, for modulating the uptake of the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for treating early cells or T-lymphocyte cells, for treating cells or T-lymphocyte cells, for stimulating cells or T-lymphocyte cells, for treating sports related joint problems, recombinate the release of proteoglycans from cartilage defects, osteoarthitis and rheumatoid arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage defects, osteoarthritis and rheumatoid arthritis. PRO cells for the support of the invention. Which is sequence data for this patent

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PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                         KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDEL6LVTLFRCIQNMPETL
                                                                    KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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RESULT 64 ADB19584

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The invention describes 305 nucleic acids encoding PRO (secreted and CC transmembrane) polypeptides (I). (I) is useful for stimulating the CC release of TNF-alpha from human blood, for modulating the uptake of CC glucose or FRA by skeletal muscle cells or adipocyte cells, for CC stimulating the proliferation or differentiation of chondrocyte cells, for cells, for stimulating the proliferation of or gene expression in pericyte CC stimulating the proliferation of for gene expression in pericyte CC stimulating the proliferation of of T-lymphocyte cells, for stimulating the proliferation of for serious supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating CC the release of a cytokine from PBMC cells, for inhibiting the binding of the release of a cytokine from PBMC cells, for inhibiting the binding of the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour. The oligonuclectide probes are useful for isolating genomic and cDNA nucleotide sequences or can tisense probes. (I) is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding cinteraction. A polympucleotide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the properation of PRO polymputide, for generating transgenic animals or knockout animals which in turn are useful in the development and concerning of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating concess. An anti-(I) -antibody is useful in diagnostic assays for PRO, e.g. detecting its expression in specific cells, tissues or serum, and for
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01-SEP-1999; 99WO-US020111.
18-OCT-1999; 99US-00403297.
18-FEB-2000; 2000WO-US013264.
23-AUG-2000; 2000WO-US015264.
23-AUG-2000; 2000WO-US032578.
01-DEC-2000; 2001US-00028072.
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Tumour necrosis factor alpha release;
Promour necrosis factor alpha release;
glucose uptake modulator; FFA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inihibitor; cytokine release stimulator; tumour;
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cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRO nucleic acid, useful for preparing a composition for treating tumor or for tissue typing.
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Godowski PJ, Gurney AL, She
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01-DEC-2000;
19-DEC-2001;
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Smith V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chordrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum, kidney; cer liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthr rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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  WPI; 2003-786913/74.
N-PSDB; ADB12895.
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                                                                           n ME, God
Stewart
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                                                                                                      Beresini M,
ME, Goddard
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                                                                           Tumas D,
                                                                                                   Deforge L, Desnoyers L,
A, Godowski PJ, Gurney
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                                                                             y AL, She
                                                                                                   Filvaroff E,
L, Sherwood
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(first entry)

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CC useful in the development and screening of therapeutically useful CC reagents. The PRO polypeptides or antibodies are used in preparing a CC medicament for treating a condition responsive to the polypeptides or CC antibodies, such as tumours, for stimulating and inhibiting proliferation CC of human microvascular endothelial cells or adipocyte cells, for modulating the uptake of glucose or FRA by skeletal muscle cells or adipocyte cells, for stimulating CC groliferation of or gene expression in pericyte cells, for stimulating CC proliferation of or gene expression in pericyte cells, for stimulating CC cells, for inducing endothelial cell tube formation and for treating CC various bone and/or cartilage disorders such as sports injuries and CC arthitis. PRO polypeptides which stimulate the release of proteoglycans CC from carrilage defects, osteoarthritis and rheumatoid arthritis. PRO CC polypeptides are also useful for treating sports related joint problems, CC polypeptides are also useful for treating various mammalian haemoglobin-cassociated disorders such as various thalassaemias and conditions which CC may benefit from enhanced local immune system cell infiltration. Note: The sequence represents a human PRO polypeptide of the invention. Note: The Sequence data for this patent is also available in electronic format from CC USPTO at segdata.uspto.gov/sequence.html.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 285
                      ABC43160;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hybridisation probes, in chromosome and gene mapping, in generating antiense RNA and DNA and in gene therapy. The polymucleotides may a be used in preparing PRO polypeptides by recombinant techniques and generating either transgenic animals or knock-out animals which are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    colon, breast, prostate, rectal, polynucleotides are useful in mo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        proliferation or differentiation of chondrocyte cells and a m detecting the presence of a tumour in a mammal (e.g. adrenal,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to isolated transmembrane polypeptides) and the invention also relates to an antipolypeptide, a method for stimulated factor-alpha (TNF-alpha) from huma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide, preparing a composition for treating e.g., tumor, or for tissue typing.
                                                       ABO43160 standard; protein; 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 285
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ectal, kidney, cervical and liver tumours in molecular biology, including uses as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
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Pred. No. 1.3e-144;
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07-OCT-1998;
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  2000WO-US000219

2000WO-US000277

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2000WO-US004341

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2001WO-US006520.
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Tumas
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1, Godowski PJ, Gurney AL, Sh
Iumas D, Watanabe CK, Wood WI,
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New transmembrane polypeptides and nucleic acids encoding the polypeptides, useful in gene therapy, in chromosome identification, chromosome markers, or in generating probes. Filvaroff E, Ga AL, Sherwood S; ood WI, Zhang Z; Gao Σ

12; Fig 660pp; English.

The invention describes an isolated nucleic acid encoding a PRO (secreted and transmembrane) polypeptide. Nucleic acids which encode PRO can be used to generate either transgenic animals or knock-out animals useful in developing and screening of therapeutically useful reagents. The nucleic acids may also be used in gene therapy, in chromosome identification, as chromosome markers, or in generating probes. The PRO polypeptides are useful as molecular markers for protein electrophoresis, and the isolated nucleic acids may be used for recombinantly expressing those markers. The PRO polypeptides are useful as molecular markers for protein selectrophoresis, and the isolated nucleic acids may be used for recombinantly expressing those markers. The PRO polypeptides are useful in diagnostic assays for PRO, and in affinity purification of PRO from recombinant cell culture or natural sources. This is the amino acid sequence of a novel human secreted and transmembrane is the amino ac: PRO polypeptide

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16-SEP-1998;
16-SEP-1998;
17-SEP-1998;
07-OCT-1998;
29-OCT-1998;
29-OCT-1998;
29-OCT-1998;
01-DEC-1998;
01-DEC-1998;
05-JAN-1999;
10-MAR-1999;
                                                                                                                                                                                                                                                                                                                                             Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FRA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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           98WO-US019330
98WO-US019437
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98WO-US025108
99WO-US005028
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Pred. No. 1.3
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10-MAY-2001;
10-MAY-2001;
10-MAY-2001;
11-MAY-2001;
25-MAY-2001;
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25-MAY-2001;
01-JUN-2001;
01-JUN-2001;
11-JUN-2001;
11-JUN-2001;
11-JUN-2001;
12-JUN-2001;
12-JUN-2001;
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21-JUN-2001;
21-JUN-2001;
                                                                                                    20-DEC-2000
20-DEC-2000
28-FEB-2001
28-FEB-2001
01-MAR-2001
09-MAR-2001
114-MAR-2001
12-MAR-2001
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23-AUG-2000;
24-AUG-2000;
08-NOV-2000;
10-NOV-2000;
01-DEC-2000;
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18-FEB-2000;
18-FEB-2000;
22-FEB-2000;
24-FEB-2000;
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30-MAR-2000;
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10-MAR-2000;
15-MAR-2000;
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01-MAR-2000;
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05-OCT-1999;
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2001US-00808689.
2001US-00816744.
2001US-0082836.
2001US-00854208.
2001US-00860216.
2001US-00860216.
2001US-00860216.
2001US-00860218.
2001US-0087034.
2001US-00874503.
2001US-008874503.
2001US-00886342.
2001US-00886342.
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2001US-00886342.
2001US-00886342.
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2001US-00886342.
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29-JUN-2001; 2001WO-US021066.
09-JUL-2001; 2001WO-US021735.
18-JUL-2001; 2001US-00908827.
06-AUG-2001; 2001US-00924419.
09-AUG-2001; 2001US-00927796.
16-AUG-2001; 2001US-00921836.
19-DEC-2001; 2001US-00028072.
Baker KP,
Gerritsen
Smith V,
                                                                                        (GETH
                                                                                        ) GENENTECH INC.
Beresini M,
1 ME, Goddard
Stewart TA,
Deforge L, Desnoyers L, Filvaroff E, G
A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
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Novel secreted and transmembrane PRO polypeptides and polynucleotides encoding them, useful for treating bone disorders, arthritis, heart attack, injuries, tumors, and stimulating release of Tumor Necrosis Factor-alpha from human blood. WPI; 2003-625490/59. N-PSDB; ADA74149.

TA,

A, Godow Tumas D,

Gao W;

Claim 12; Fig 24; 659pp; English

CC detecting the presence of a timour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, and colon, cervical and liver tumours). The polypucleotides are useful in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are cuseful in the development and screening of therapeutically useful creagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of cylucose or FRA by skeletal muscle cells, for modulating the uptake of cylucose or FRA by skeletal muscle cells or adipocyte cells, for stimulating conditions responsive to the polypeptides or cells, for inducing endothelial cell tor adipocyte cells, for stimulating coliferation of or gene expression in pericyte cells, for stimulating coliferation of or gene expression in pericyte cells, for stimulating cartilage disorders such as sports injuries and cartilities proliferation are useful for treating sports related joint problems, complypeptides are also useful for treating sports related joint problems, cartilage defects, osteoarthritis and rheumation architis. PRO colongated disorders such as various thalassaemias and conditions which cardinal properties are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which constituted by the properties of the invention. Note: The sequence data for this patent is also available in electronic format from USPFO at sequence data of this patent is also available in electronic format from useful accordance where the prope The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypuctacetides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for

Sequence 285 AA;

Query Match Best Local :

Similarity

Indels Length

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Pred. No. 1.3e-144;
Mismatches 0;
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RESULT 68
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the relass of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
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01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated, secreted and transmembrane PRO polypeptides and nucleic acids, useful for the diagnosis, prevention and/or treatment of tumors, such as lung, colon, breast, prostate, rectal, cervical and/or liver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gerritsen ME, Gov
Smith V, Stewart
                                                                                                                                                                                                                                                                                                                                                                                                              Claim 12; Fig
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ME, Goddard
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Tumas D,
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A, Godowski PJ, Gurney AL, Sh
Numas D, Watanabe CK, Wood WI,
                                                                                                                                                                                                                                                                                                                                                                                                                 English.
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consection in the development and screening of therapeutically useful careagents. The PRO polypeptides or antibodies are used in preparing a conditionment for treating a condition responsive to the polypeptides or cantibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or Fra by skeletal muscle cells or adipocyte cells, for stimulating to the uptake of continuating differentiation of adipocyte cells, for stimulating to proliferation of or gene expression in pericyte cells, for stimulating continuation of or gene expression in pericyte cells, for stimulating continuation of or gene expression in pericyte cells, for stimulating continuation of or gene expression in pericyte cells, for stimulating continuation of or gene expression in pericyte cells, for stimulating continuation of or gene expression in pericyte cells, for stimulating continuation of or treating continuation and for treating continuations and for treating continuation continuations which continuation continuations continuation continuations which continuation continuations continuation continuations which continuation continuations continuation continuations continuation con
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                                                                          KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL 240
                                                                                                                                             GEGNSSONSRNKRAVOGPEETVTODCLOLIADSETPTIOKGSYTFVPWLLSFKRGSALEE 180
                                                                                                                                                                                                                                  MDDSTEREOSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                  PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL 285
                                                       KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                                               GEGNSSONSRNKRAVQGPEETVTODCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
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PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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Pred. No. 1.3e-144;
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                                                                                                 Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; transmer; adrenal; lung; colon; breast; prostate; rectum; kidne liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; P-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disports injury; proteoglycan; articular cartilage defect; osterheumatoid arthritis; haemoglobin-associated disorder thalass immune system cell infiltration.
                                                                                                                                                                                                                                                                                                                                                                                    Human PRO polypeptide #12.
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Homo sapiens

thalassaemia;

osteoarthritis; disorder; kidney;

tumour;

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                                                                                                                                                                                     CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung, CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polynucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating CC be used in preparing PRO polypeptides by recombinant techniques and in CC generating either transgenic animals or knock-out animals which are CC useful in the development and screening of therapeutically useful CC reagents. The PRO polypeptides or antibodies are used in preparing a CC medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of CC glucose or FFA by skeletal muscle cells, for stimulating cells or adipocyte cells, for stimulating conditions are as useful for treating endothelial cells or adipocyte cells, for stimulating cells or inducing endothelial cells or adipocyte cells, for stimulating cells, for stimulating cells, for stimulating cells, for stimulating cells or adipocyte cells, for stimulating cells, for stimulating cells or adipocyte cells, for stimulating cells or adipocyte cells, for stimulating conditions bone and/or cartilage disorders such as sports injuries and cartilage are useful for treating sports-related joint problems, proceeding the certain such as sports injuries and conditions which may benefit from enhanced local immune system cell infiltration. This sequence data for this patent is also available in electronic format from useful cells are also defects, osteoarthrib.
                                                                                                            Query Match
Best Local Sir
Matches 285;
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16-SEP-1998;
02-JUN-1999;
25-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypucleocides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for
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02-JUN-2000; 2000WO-US015264.
01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
                                                                                                                                                                                     Sequence
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                                                                                                                               Similarity
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   LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
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                                                                  MDDSTEREQSRLTSCLXKREEMXLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
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ME, Goddard
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98US-0100634P.
99WO-US012252.
99US-00380137.
                                                                                                          100.0%; Score 1451; DB 6; 100.0%; Pred. No. 1.3e-144; cive 0; Mismatches 0;
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Tumas D,
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, Godowski PJ, Gurney
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14-MAY-1999
02-UUN-1999
01-SEP-1999
08-SEP-1999
13-SEP-1999
15-SEP-1999
15-SEP-1999
05-OCT-1999
29-NOV-1999;
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10-MAR-1999;
20-APR-1999;
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01-DEC-1998;
05-JAN-1999;
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16-SEP-1998;
17-SEP-1998;
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29-0CT-1998
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14-JUL-1998;
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98WO-US019093
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0-US020111.
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thalassaemia;
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30-MAY-2000;
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08-NOV-2000;
10-NOV-2000;
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06-JAN-2000;
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18-FEB-2000;
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22-DEC-1999;
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22-MAR-2001;
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10-MAY-2001;
11-MAY-2001;
15-MAY-2001;
25-MAY-2001;
25-MAY-2001;
01-JUN-2001;
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14-JUN-2001;
14-JUN-2001;
14-JUN-2001;
12-JUN-2001;
12-JUN-2001;
20-JUN-2001;
21-JUN-2001;
21-JU
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2000WO-US000277.
2000WO-US000376.
2000WO-US003565.
2000WO-US004341.
2000WO-US004342.
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2001US-0087035.
2001US-0872035.
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Baker KP, Beresini M, Gerritsen ME, Goddard Smith V, Stewart TA, A, Godov Tumas D, Deforge L, Desnoyers L, Filvaroff E, A, Godowski PJ, Gurney AL, Sherwood Tumas D, Watanabe CK, Wood WI, Zhang S Gao

the secreted and transmembrane PRO polypeptides useful for stimulating release of tumor necrosis factor alpha in human blood and detecting presence of tumor in a mammal.

Claim 12; Fig 24; 638pp; English

CC transmembrane polypeptides) and the polypucleotides (secreted and CC transmembrane polypeptides) and the polypucleotides encoding them. The CC invention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis CC polypucleotides are useful in molecular biology, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polypucleotides are useful in molecular biology, including uses as CC polypucleotides are useful in molecular biology, including uses as CC polypucleotides are useful in molecular biology, including uses as CC polypucleotides are useful in molecular biology, including uses as CC polypucleotides are useful in molecular biology, including uses as CC polypucleotides are useful in the development and screening of therapeutically useful colored to the proparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are CC useful in the development and screening of therapeutically useful cC useful in the development and screening of therapeutically useful cC useful in the development and screening of therapeutically useful cC useful in the transgenic animals or knock-out animals which are CC stimulating a condition responsive to the polypeptides or CC useful in the transfer of adipocyte cells, for modulating the uptake of CC glucose or FRA by skeletal muscle cells, for modulating the uptake of CC glucose or FRA by skeletal muscle cells or adipocyte cells, for stimulating cC translating endothelial cell tube formation and for treating proteins of the proliferation of inner ear utricular supporting cells or Tlymphocyte cells, for stimulating the problems, for treating sports injuries and conditions which associated disorders such as various thalassaemias and conditions which cc sequence are also useful for treating various mammalian hemoglobin-discussions of the pro

Sequence 285 3

Similarity

Length

285;

S 5 S 밁 8 Db Š 밁 Query Match Best Local S Matches 285 285; 181 121 181 121 61 61 LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC 100.0%; Score 1451; DB 6; ilarity 100.0%; Pred. No. 1.3e-144; Conservative 0; Mismatches 0; 285 285 0 Gaps 240 180 180 120 120 60 240

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GENENTECH

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RESULT 71

ADA84948

ID ADA84

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XX PARE NOVEL

XX Human

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XX Tumou

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PF 19-DE

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PF 19-DE

XX O3-MA

PF 19-DE

XX CETH

XX
The invention describes 305 nucleic acids encoding PRO (secreted and CC transmembrane) polypeptides (I). (I) is useful for stimulating the CC release of TNF-alpha from human blood, for modulating the uptake of CC glucose or FFA by skeletal muscle cells or adipocyte cells, for Stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte (cells, for stimulating the proliferation of or gene expression in pericyte (cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of TNPmphocyte cells, for stimulating the proliferation of TNPmphocyte cells, for stimulating the proliferation of TNPmphocyte cells, for stimulating of the presence of tumour in a mammal. The tumour is lung, colon, breast, cells, for stimulating genomic and cDNA nucleotide sequences or creative to identify other proteins or molecules involved in binding in the assays to identify other proteins or molecules involved in binding in the assays to identify other proteins or molecules involved in binding in the problem. A polymucleotide (II) encoding (I) is useful in chromosome conclusion of FRO polypeptide, for generating transgenic animals or chromosome dentification, as chromosome marker, and for generating concording of therapy, for chromosome dentification, as chromosome marker, and for generating concording its expression in specific cells, tissues or serum, and for detecting its expression in specific cells, tissues or serum, and for
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19-DEC-2001;
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Tumour necrosis factor alpha release; TNF-alpha release;
glucose uptake modulator; FFA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inihibitor; cytokine release stimulator; tumour;
lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumo
cervical tumour; liver tumour; chromosome mapping; gene mapping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               typing
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    acid encoding a PRO polypeptide, useful for for treating e.g. tumor by gene therapy, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000US-0187202P.
2000WO-US032678.
2001US-00028072.
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Goddard A, Godowski PJ, Gurney AL, Sherwood S;
art TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
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RESULT 72
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                                                   Gerritsen ME, Goddard Smith V, Stewart m
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                                    WPI;
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01-DEC-2000; 2000WO-US032678
19-DEC-2001; 2001US-00028072
                                                                                                                                                                                                                                                                                      cervical tumour; liver to gene therapy; chromosome
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                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                       glucose uptake modulator; FFA uptake modulator; cell proliferation stimulator; cell differentiation stimulator; cell differentiation stimulator; cell differentiation inihibitor; cytokine release stimulator; tumour; cell differentiation tumour; breast tumour; prostate tumour; rectal tumour; lumour; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                                                                                                                                                                        Novel human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          affinity purification of PRO from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO
                                                                                                              (GETH ) GENENTECH INC.
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                                  2003-786911/74.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein;
                                                                                                                                                                                                                                                                                                                                                                                                       and transmembrane protein PRO738
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                                                         IA, Godow
Tumas D,
                                                                       Deforge L, Desnoyers L,
A, Godowski PJ, Gurney
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Pred. No. 1.3
0; Mismatches
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                                                         Watanabe
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                                                           Wood WI,
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L, Sherwood S;
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New PRO nucleic acid,

useful

for preparing a composition

for treating

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RESULT 73
ADB29652
ID ADB29
XX
XX
AC ADB29
XX
XX
DT 20-NC
XX
DT 20-NC
XX
XX
Human
XX
KW Human
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Best Local Similarity
Matches 285; Conserv
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         Human;
tumour
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   PRO; secreted polypeptide; transmembrane polypeptide; necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
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17-SEP-1998;
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98WO-USO21141

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cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.

98WO-US018824. 98WO-US019093. 98WO-US019094. 98WO-US019177. 98WO-US019330. 98WO-US019337.

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2001US-00886382

2001US-009886342

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(GETH _ GENENTECH INC.

Gerritsen ME, God Smith V, Stewart Beresini M, Deforge L, Desnoyers L, Filvaroff E, G ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z; Gao

N-PSDB; 2003-720081/68.)B; ADB29651.

Novel secreted and transmembrane PRO polypeptides useful for the release of tumor necrosis factor alpha and detecting the b mammal. stimulating presence of

Claim 12; Fig 24; 638pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful

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Best Local :
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                                                                                                                           Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervliver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthr; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
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2002US-00121061

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contransmembrane polypeptides) and the polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The convention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the prostate, restail, kidney, cervical and liver tumours). The polynucleotides are useful in molecular bology, including uses as complying the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular bology, including uses as complying the presence of a tumour in a mammal (e.g. adrenal, lung, complying the presence of a tumour in a mapping, in generating complying the polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful complying a condition responsive to the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or complying a condition responsive to the polypeptides or stimulating differentiation of adipocyte to the polypeptides or stimulating the uptake of plucose or FRA by skeletal muscle cells, for modulating the uptake of compliance of the proliferation of or gene expression in pericyte cells, for stimulating the uptake of the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for stimulating and ordinal cells or adipocyte cells, for stimulating cells or cartilage are useful for treating such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans of cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-
                 19-MAR-2001
11-MAR-2001
22-MAR-2001
10-MAY-2001
10-MAY-2001
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Smith V,
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N-PSDB; ADA80179.
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28-FEB-2001;
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n ME, Goddard
Stewart TA,
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2001US-008863436.
2001US-00886345.
2001US-008863878.
2001US-00887879.
2001US-00887875.
2001US-00908827.
2001US-00908827.
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2001US-00931836.
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2001US-00931836.
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Tumas
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A, Godowski PJ, Gurney i
Tumas D, Watanabe CK, W
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heart attack,
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02-DEC-1999; 02-DEC-1999; 02-DEC-1999; 16-DEC-1999; 20-DEC-1999;

08-SEP-1999

99WO-US010733. 99WO-US012252. 99WO-US020111.

99WO-US005190 99WO-US005028

98WO-US024855. 98WO-US025108. 99WO-US000106. 98WO-US022991 98WO-US022992

99WO-US028414. 99WO-US028214. 99WO-US028313. 99WO-US028409. 99WO-US028409.

99WO-US021547 99WO-US020594. 99WO-US020944.

99WO-US028634

14-SEP-1998 14-SEP-1998

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98WO-US019094. 98WO-US019177. 98WO-US019330. 98WO-US019437. 98WO-US021141.

98WO-US019093

20-DEC-1999; 22-DEC-1999;

99WO-US028564 99WO-US028564 99WO-US028565 99WO-US030995 99WO-US030991 99WO-US03020 99WO-US031243 99WO-US031243 2000WO-US030279 2000WO-US000279 2000WO-US0003166 2000WO-US004342 2000WO-US004342 2000WO-US004344 2000WO-US004344 2000WO-US004344 2000WO-US0043414 2000WO-US0043414 2000WO-US005601 2000WO-US005601

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06-JAN-2000
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11-FEB-2000
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24-FEB-2000
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07-MAR

2000WO-US006884.
2000WO-US0075377.
2000WO-US007537.
2000WO-US008439.
2000WO-US014941.
2000WO-US014941.
2000WO-US020315264.
2000WO-US02031.
2000WO-US02031.
2000WO-US0203522.
2000WO-US033673.
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Best Local
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01-DEC-2000;
19-DEC-2001;
                                             Baker KP,
Gerritsen
Smith V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; PRO; secreted polypeptide; transmembrane polypeptide; trumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; Tlymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injur; proteoglycan; articular cartilage defect; osteoarthritis; hemmatoid arthritis; hamoglobin-associated disorder thalassaemia; immune system cell infiltration.
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     2003-765414/72
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                                             n ME, Goddard Stewart TA,
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                                             Deforge L, Desnoyers L, Filva
A, Godowski PJ, Gurney AL, Sh
Tumas D, Watanabe CK, Wood WI,
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                                        lvaroff E, Gau
Sherwood S;
Zharg Z;
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N-PSDB;
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                                                                                               nucleic acid, useful for umor or for tissue typing
                                                                                          Fig 24; 637pp; English
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                                                                                                  a composition
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CR The invention relates to isolated human PRO polypeptides (secreted and CR transmembrane polypeptides) and the polypuclectides encoding them. The CR invention also relates to an antibody which specifically binds to a PRO CR polypeptide, a method for stimulating the release of tumour necrosis CR factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CR polymuclectides are useful in molecular biology, including uses as CR hybridisation probes, in chromosome and gene mapping, in generating either transgenic animals or knock-out animals which are CR polymuclectides may also be useful in the development and screening of therapeutically useful crasgents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting the uptake of CR glucose or FFA by skeletal muscle cells, for modulating the uptake of CR glucose or FFA by skeletal muscle cells, for modulating the uptake of CR proliferation of or gene expression in pericyte cells, for stimulating CR proliferation of inner ear utricular supporting cells, for stimulating cells or T-lymphocyte cells, for inducing enotothelial cell tube formation and for treating carticular such as sports injuries and constrainage are useful for treating sports related joint problems, sequence are also useful for treating sports related joint problems, company to the proliferation. This sequence data for this patent is also available in electronic format from CR USPTO at segdata.uspto.gov/sequence.html.

Sequence 285 A A

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                 PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                      KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                                                    GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
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Pred. No. 1.3e-144;
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29-OCT-1998;
20-NOV-1998;
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14-MAR-1999;
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11-SEP-1999;
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98WO-US019074
98WO-US019177
98WO-US01937
98WO-US019437
98WO-US021141
98WO-US022991
98WO-US022991
98WO-US025108
99WO-US005108
99WO-US005107
99WO-US005117
99WO-US01225
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99WO-US03091
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PR 24-FEB-2000, 2000WO-US005004.
PR 02-MAR-2000, 2000WO-US005341.
PR 10-MAR-2000, 2000WO-US005311.
PR 11-MAR-2000, 2000WO-US005311.
PR 11-MAR-2000, 2000WO-US006884.
PR 21-MAR-2000, 2000WO-US006884.
PR 21-MAR-2000, 2000WO-US0017577.
PR 21-MAR-2000, 2000WO-US01494.
PR 11-MAR-2000, 2000WO-US01494.
PR 11-MAR-2000, 2000WO-US01494.
PR 21-MAR-2000, 2000WO-US01494.
PR 21-MAR-2000, 2000WO-US01494.
PR 21-MAR-2000, 2000WO-US01494.
PR 21-MAR-2000, 2000WO-US012524.
PR 21-MAR-2000, 2000WO-US013952.
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PR 21-MAR-2000, 2000WO-US030952.
PR 21-MAR-2001, 2001WO-US030952.
PR 21-MAR-2001, 2001WO-US030966.
PR 21-MAR-2001, 2001WO-US03096.
PR 21-MAR-2001, 2001WO-U
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Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao V Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-644800/61. N-PSDB; ADA46646.

New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or PRO4978, useful in molecular biology, chromosome and gene mapping, in generating antisense RNA and DNA, and in gene therapy.

laim 12; Fig 24; 638pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung,

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Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pricyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheematoid arthritis; haemoglobin-associated disorder thalassaemia;
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detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polynucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating CC antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in CC generating either transgenic animals or knock-out animals which are CC useful in the development and screening of therapeutically useful care entired the pRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of number ear useful cells, for modulating the uptake of CC glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the uptake of CC glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating CC gracing endothelial cell tube formation and for treating CC the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating CC cells, for inducing endothelial cell tube formation and for treating CC artifulage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are useful for treating sports-related joint problems, CC artifular certilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-complete cells are collar immune system cell infiltration. This complete cells are presents a human PRO polypeptide of the invention commat from CC uspro at seedsta uspto, cov/secons-tuml.
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Smith V,
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16-SEP-1998;
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99US-010634P.

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Tumas D,
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A, Godowski PJ, Gurney AL, Sh
Tumas D, Watanabe CK, Wood WI,
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01-DEC-2000;
19-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; apports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
                                                                                                                                                                                                                                                                                                                                     Gerritsen ME, God
Smith V, Stewart
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                                                                                                                                                                                 New PRO nucleic acid, useful for : polypeptide and for manufacturing
                                                                                                                                                                                                                                                           N-PSDB;
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                                                                                                       Claim
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)B; ADA93118.
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ME, Goddard A, God
TA, Tumas I
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                                                                                                  Fig
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2000WO-US032678
2001US-00028072
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A, Godowski PJ, Gurney F
Tumas D, Watanabe CK, Wo
                                                                                                       English.
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for diagnosing (
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AL, Sherwood S;
ood WI, Zhang Z;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cc polypeptide, a method for stimulating the release of tumour necrosis cc factor-alpha (TNF-alpha) from human blood, a method for stimulating the cc proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polypucleotides are useful in molecular biology, including uses as complying the proparting probes, in chromosome and gene mapping, in generating complying probes, in chromosome and gene mapping, in generating complying properties by recombinant techniques and in generating extended in preparing a complying properties or the polypucleotides may also complying the properties of the reagents. The PRO polypeptides or annibodies are used in preparing a commendation of the properties or annibodies are used in preparing a complying transport treating a condition responsive to the polypeptides or complying the uptake of complying the uptake of complying the uptake of complying the uptake of complying the proliferation of adipocyte cells, for stimulating the uptake of complying the expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating conditions are also cartilage disorders such as sports injuries and complying the uptake of complying the proliferation of inner ear utricular supporting cells, for stimulating complying the proliferation of inner ear utricular supporting cells, for stimulating cells, for inducing endothelial cell tube formation and for treating complying the uptake of complying th
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Best Local :
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KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQMMPETL
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                                                                                        KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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RESULT 79
ADB26469
ID ADB26
XX ADB26
AC ADB26
XX 20-NC
XX 20-NC
XX Humar
XX Humar
KW tumoo
KW tumoo
KW 11veb
KW 11veb
KW 11veb
Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell;
                                                                                                                Human
                                                                                                                                                                                                                          ADB26469
                                                                                                            PRO polypeptide #12.
                                                                                                                                                                                                                          standard;
                                                                                                                                                 (first entry)
                                                                                                                                                                                                                          protein;
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The invention relates to isolated human PRO polypeptides (secreted transmembrane polypeptides) and the polynucleotides encoding them. invention also relates to an antibody which specifically binds to a

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29-OCT 1998
29-OCT 1998
20-NOV 1998
01-DEC 1998
01-JAN 1999
10-MAR 1999
11-MAR 1999
11-MAR 1999
11-MAR 1999
11-SEP 1999
13-SEP 1999
15-SEP 1999
15-SEP 1999
15-SEP 1999
16-DEC 1999
10-DEC 1999
11-FEB 2000
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17-SEP-1998;
07-OCT-1998;
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28-AUG-1998;
10-SEP-1998;
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12-JUN-1998;
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14-SEP-1998;
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98WO-USC25108

99WO-USC05028

99WO-USC05028

99WO-USC02111

99WO-USC021541

99WO-USC021541

99WO-USC021541

99WO-USC021541

99WO-USC021541

99WO-USC028311

99WO-USC028311

99WO-USC028311

99WO-USC028311

99WO-USC028311

99WO-USC028311

99WO-USC028311

99WO-USC028551

99WO-USC028551

99WO-USC028551

99WO-USC03091

99WO-USC03091

99WO-USC030021

99WO-USC030021

99WO-USC03021

99WO-USC03027

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2000WO-USC031241

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2000WO-USC031274

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98WO-US022992
98WO-US024855
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98WO-US019437.
98WO-US021141.
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98WO-US019094.
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11-AUGL-2000
11-AUG-2000
23-AUG-2000
24-AUG-2000
10-NOV-2000
10-DEC-2000
20-DEC-2000
20-DEC-2001
20-JUN-2001
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30-MAY-2000;
02-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GETH ) GENENTECH INC.
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2001US-00860216

2001US-00866034

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2001US-00872035

2001US-0087203

2001US-00874503

2001US-00886342

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2000WO-US030873.
2000WO-US032678.
2000WS-00747259.
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2001US-00828366
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Baker KP, Ber Gerritsen ME, Smith V, Stew Stewart Beresini M, ME, Goddard d A, Godow Tumas D, Deforge L, Desnoyers L, Filvaroff E, G A, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z; Gao W;

WPI; 200 N-PSDB; 2003-777249/73. DB; ADB26468.

Novel isolated PRO polypeptide useful for treating diabetes, hyper- or hypo-insulinemia, sports injuries, arthritis, obesity, stroke, heart attack, various coagulation disorders, tumors.

Claim 12; Fig 24; 660pp; English.

The invention relates to isolated human PRO polypeptides (secreted and Ct transmembrane polypeptides) and the polypurcleotides encoding them. The CC invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis Cf factor-alpha (TNF-alpha) from human blood, a method for stimulating the prosence of a tumour in a mammal (e.g. adrenal, lung, Cc colon, breast, prostate, rectal, kidney, cervical and inver tumours). The CC polynucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in CC useful in the development and screening of therapeutically useful CC useful in the development and screening of therapeutically useful condicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation proliferation The

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RESULT 80
ADB30756
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Best Local :
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                          11-APR-2002; 2002US-00121042
                                                                                                                 US2003096386-A1
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les 285; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard;
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Pred. No. 1.3e-144;
; Mismatches 0;
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20-DEC 1999
21-MAR 1999
21-MAR 1999
21-MAR 1999
21-SEP 1999
21-SEP 1999
22-DEC 1999
23-DEC 1999
23-DEC 1999
24-FEB 2000
24-FEB 2000
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12-JUN-1998
14-JUL-1998
28-AUG-1998
10-SEP-1998
14-SEP-1998
14-SEP-1998
14-SEP-1998
16-SEP-1998
17-SEP-1998
97WO-US012456.
98WO-US012456.
98WO-US017888.
98WO-US017888.
98WO-US019094.
98WO-US019917.
98WO-US019317.
98WO-US01941.
98WO-US022991.
98WO-US022991.
98WO-US022991.
99WO-US025108.
99WO-US025108.
99WO-US025108.
99WO-US025108.
99WO-US025109.
99WO-US025009.
99WO-US
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01-JUN-2001;
01-JUN-2001;
05-JUN-2001;
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18-MAY-2001;
25-MAY-2001;
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05-APR-2001;
10-MAY-2001;
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09-MAR-2001;
14-MAR-2001;
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09-AUG-2001;
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18-JUL-2001;
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19-JUN-2001;
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25-MAY-2001;
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2001US-00808689
2001US-00816744
2001US-00854280
2001US-00854280
2001US-008660216
2001US-008660216
2001US-00866028
2001US-00866028
2001US-00866028
2001US-0087203
2001US-008974503
2001US-008974503
2001US-00887879
2001US-00887879
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2001US-00887879
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2001US-00887879
2001US-00887879
2001US-00908872
2001US-00908872
2001US-0090877796
2001US-00908827796
2001US-00931836
2001US-00931836
2001US-00931836
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241 241

PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL

Gerritsen Smith V, Beresini M, ME, Goddard Stewart i A, Godow Tumas D, Deforge L, Desnoyers L, Filva A, Godowski PJ, Gurney AL, She Tumas D, Watanabe CK, Wood WI, Filvaroff E, L, Sherwood s z Gao Ξ

WPI: 2003-786990/74.

Novel isolated PRO polypeptide useful for tre hypo-insulinemia, sports injuries, arthritis, attack, various coagulation disorders, tumors treating diabetes, h diabetes, hyper-ity, stroke, heart or

Claim 12; Fig 24; 638pp; English

The invention relates to isolated human PRO polypeptides (secreted and Ct transmembrane polypeptides) and the polypuchleckides encoding them. The cinvention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis of factor-alpha (FWF-alpha) from human blood, a method for stimulating the prosence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymclectides are useful in molecular biology, including uses as comparing the preparing rectal, kidney, cervical and liver tumours). The polymclectides are useful in molecular biology, including uses as comparing either transgenic animals or knock-out animals which are considered in the development and screening of therapeutically useful creagants. The PRO polypeptides by recombinant techniques and in generating a treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FFA by skeletal muscle cells, for modulating the uptake of cells, for inducing endothelial cells, for modulating the uptake of ground some and/or cartilage disorders such as sports injuries and cells, for inducing endothelial cells, for stimulating cells, for treating various bone and/or cartilage disorders such as sports injuries and cells, for conditions are also useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful foral treating sports and rheumatoid arthritis. PRO polypeptides are also useful foral treating sports and conditions which may benefit from enhanced local immune system cell infiltration. Note: The sequence represents a human PRO polypeptide of the invention. Note: The

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Best Local
                                                                                                                                                                                                                                                                                                                 sequence data for this patent is also available in electronic format from the USPTO website at secdata.usnto cov
                                                                                                                                                                                                                                                                                        Sequence 285
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PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                                                GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                       LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLBEAPAVTAGLKIFEPPAP
                                                                                                                                                                                                    MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                             KBNKILVKBTGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                               GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
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Pred. No. 1.3
0; Mismatches
                               QRKKVHVFGDELSLVTLFRCIQNMPETL
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.3e-144;
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       THE PRESENTATION OF SOME STATES OF S
14-JUL-1998
28-AUG-1998
10-SEP-1998
14-SEP-1998
14-SEP-1998
14-SEP-1998
16-SEP-1998
17-SEP-1998;
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                                                                                                                                                                                                                                                                             31-MAR-1997;
12-JUN-1998;
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98WO-US014552
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07-OCT-1998; 29-OCT-1998; 29-OCT-1998;

98WO-US021141. 98WO-US022991. 98WO-US022992. 024855

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99WO-US012252. 99WO-US020111. 99WO-US020594. 99WO-US020944. 99WO-US021090.

99WO-US005028. 99WO-US005190. 99WO-US008615.

99WO-US021547. 99WO-US023089. 99WO-US028214.

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CY
The invention describes 305 nucleic acids encoding PRO (secreted and createsmembrane) polypeptides (I). (I) is useful for stimulating the createse of TNF-alpha from human blood, for modulating the uptake of CR glucose or FFA by skeletal muscle cells or addpooyte cells, for createse of TNF-alpha from human blood, for modulating the uptake of CR glucose or FFA by skeletal muscle cells or addpooyte cells, for stimulating the proliferation or differentiation of chondrocyte cells, for cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of Thymphocyte cells, for stimulating the proliferation of Thymphocyte cells, for detecting the release of a cytokine from PBMC cells for inhibiting the binding of the release of acytokine from PBMC cells for inhibiting the binding of the presence of tumour in a mammal. The tumour is lung, colon, breast, crevical or liver tumour. The oligonuclectide probes are useful for isolating genomic and cDNA nuclectide sequences or can useful for isolating genomic and cDNA nuclectide sequences or cand gene mapping, in generation of antisense RNA and DNA, in the canding of therapeutically useful as therapeutic agent. PRO is useful in chromosome canding of therapeutically useful in chagnes and DNA, in the coreaning of therapeutically useful in diagnostic assays for PRO, e.g. chapter of the supplied of the sup
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Matches 285; Conservative (
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14-JUN-2001;
19-JUN-2001;
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21-JUN-2001;
22-JUN-2001;
22-JUN-2001;
29-JUL-2001;
09-JUL-2001;
09-AUG-2001;
10-AUG-2001;
11-JUN-2001;
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Gerritsen |
Smith V,
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N-PSDB; ADA60683.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New secreted and transmembrane for manufacturing a medicament
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                                                                                                                                                                                               Sequence 285
                                                                                                                                                                                                                                   polypeptide
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Stewart TA,
LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                     MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
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2001US-00874503.
2001US-00874503.
2001US-00882636.
2001US-00886342.
2001US-00887879.
2001US-00887879.
2001WS-US021016.
2001WS-US021016.
2001WS-US021036.
2001WS-US021735.
2001US-00908827.
2001US-00908419.
2001US-00924796.
2001US-00924319.
2001US-009280736.
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Tumas
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A, Godowski PJ, Gurney I
Tumas D, Watanabe CK, Wo
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Pred. No. 1.3e-144;
; Mismatches 0;
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AL, Sherwood S
ood WI, Zhang
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24-AUG-2000;
08-NOV-2000;
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21-MAR-2001;
21-MAR-2001;
21-MAR-2001;
21-MAY-2001;

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2000WO-US005746.
2000WO-US006841.
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2000WO-US007377.
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2000WO-US014042.
2000WO-US014964.
2000WO-US015264.
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2000WO-US023312.
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2000WO-US03352.
2000WO-US033673.
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2000WO-US036666.
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2001US-00854280.
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2001US-00860216.
2001US-008660314.

01-DEC-1999
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2000WO-US000219 2000WO-US000277 2000WO-US0003565 2000WO-US003545 2000WO-US004341 2000WO-US004341 2000WO-US004314 2000WO-US004914 2000WO-US005601

99WO-US028311 99WO-US028301 99WO-US0288301 99WO-US028634 99WO-US028561 99WO-US028565 99WO-US030951 99WO-US030911 99WO-US030911 99WO-US030720 99WO-US031243

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30-MAR-2000;
01-DEC-2000;
19-DEC-2001;
The invention relates to isolated human PRO polypeptides (secreted transmembrane polypeptides) and the polynucleotides encoding them. invention also relates to an antibody which specifically binds to polypeptide, a method for stimulating the release of tumour necros factor-alpha (TNF-alpha) from human blood, a method for stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNP-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FPA; skeletal muscle cell; adipoyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
                                                                                                                                                                                                                New isolated, secreted and transmembrane PRO polypeptides and acids, useful for the diagnosis, prevention and/or treatment such as lung, colon, breast, prostate, rectal, cervical and/or
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25-AUG-1999;
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)B; ADB23830.
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Œ, Goddard
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A, Godowski PJ, Gurney J
Tumas D, Watanabe CK, W
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Colon, breast, prostate, rectal, kloney, cervical and liver tumouts). The colon, breast, prostate, rectal, kloney, incliding uses as comparing leads are useful in molecular biology, incliding uses as comparing station probes, in chromosome and gene mapping, in generating cantisense RNA and DNA and in gene therapy. The polymucleotides may also be used in preparing PRO polymeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polymeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polymeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of fundar muscle cells, for modulating the uptake of glucose or FFA by skeletal muscle cells, or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating carthitis. PRO polymeptides which stimulate the release of proteoglycans from cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polymeptides which stimulate the release of proteoglycans from cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polymeptides osteoarthritis and rheumatoid arthritis. PRO polymeptides osteoarthritis and conditions which may benefit from enhanced local immune system cell infiltration. Note: The sequence represents a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from USPTO at segdata.uspto.gcv/sequence.html.
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RESULT 83
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Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor alpha; TNF alpha; chondrocyte cell; transmer; adrenal; lung; colon; breast; prostate; rectum; kidn: liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; P-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage dispendents cell tube formation; bone disorder; cartilage dispendents cell tube formation; kidney; tumour; cervix;

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CC Treasmembrane polypeptides) and the polynucleotides (secreted and CC transmembrane polypeptides) and the polynucleotides encoding them. The CC invention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis CC factor-alpha (TNP-alpha) from human blood, a method for stimulating the prosition or differentiation of chondrocyte cells and a method for colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polynucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating cells and in generating PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock out animals which are CC useful in the development and screening of therapeutically useful cells for properting a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of for gene expression in periovic cells, for stimulating the uptake of CC glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating cells for stimulating through the proliferation of or gene expression in periovic cells, for stimulating cells for stimulating cells or T-lymphocyte cells, for stimulating endothelial cell tube formation and for treating cells or T-lymphocyte cells, for stimulating cells or T-lymphocyte cells, for stating stores and cells or the protection. This cells ce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-SEP-1998; 98US-0098750P.
01-SEP-1999; 99WO-US020111.
18-OCT-1999; 99US-00403297.
18-FEB-2000; 2000WO-US004342.
08-NCV-2000; 2000WO-US030552.
01-DEC-2000; 2000WO-US0302678.
19-DEC-2001; 2001US-00028072.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRO nucleic acid, useful for tumor or for tissue typing.
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ME, Goddard
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Godowski PJ, Gurney
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y AL, Sherwood S;
Wood WI, Zhang Z
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Query Match 100.0%; Best Local Similarity 100.0%; Matches 285; Conservative 0;

Score 1451; DB 6; Pred. No. 1.3e-144; ; Mismatches 0;

Indels Length

0

Gaps

0

The invention relates to isolated human PRO polypeptides (secretransmembrane polypeptides) and the polynucleotides encoding the invention also relates to an antibody which specifically binds

(secreted

285;

Sequence

285

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RESULT 84
ADA80732
ID ADA8(
                                                                                                                                                                                                                                                                                30-MAY-2000;
01-DEC-2000;
19-DEC-2001;
                                                                                                                                                       Baker KP,
Gerritsen
Smith V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cerliver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthr; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
                                   New PRO nucleic acid, useful for e.g., tumor or for tissue typing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human PRO polypeptide #12
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                                                                                              WPI; 2003-755111/71.
N-PSDB; ADA80731.
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    Claim
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                                                                                                                                                          , Beresini M,
n ME, Goddard
Stewart TA,
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Fig
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; 2000WO-US014941.
; 2000WO-US032678.
; 2001US-00028072.
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  24;
637pp; English.
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A, Godowski
                                                                                                                                                              'n
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                                                        preparing
                                                                                                                                                              L, Desnoyers L,
ski PJ, Gurney i
Watanabe CK, W
                                                               a composition
                                                                                                                                                              Wood
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AL, Sherwood S
ood WI, Zhang
                                                               for
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                                                               treating
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osteoarthritis;

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RESULT 85
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XX Human
XX Human
XX Human
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KW Cunce
KW Cunce
KW Skele
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Best Local S
Matches 285
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                       Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondcrocyte cell; t cancer; adrenal; lung; colon; breast; prostate; rectum; kidn liver; microvascular endothelial cell; glucose; FFA;
  skeletal muscle
                                                                                                                                                                                                                            20-NOV-2003
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                                                                                                                                                                                                                                                                                                                                            standard;
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                                                                                                                                                                polypeptide #12.
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                                                                                                                                                                                                                            (first entry)
  cell; adipocyte cell; pericyte cell;
                                                                                                                                                                                                                                                                                                                                       protein;
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Pred. No. 1.3e-144;
Mismatches 0;
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                                                                                   tumour;
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13-SEP-1999
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08-MAR-1999;
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2000WO-US004914
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2000WO-US005601
2000WO-US005681
2000WO-US006381
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The invention relates to isolated human PRO polypeptides (secreted and Ct transmembrane polypeptides) and the polypuruleotides encoding them. The Ct invention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polynucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating and contisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in CC generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful creagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation
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Smith V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated PRO polypeptides, useful for treating diabetes, hyperhypo-insulinemia, sports injuries, arthritis, obesity, stroke, heart attack, various coagulation disorders and tumors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim
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Œ, Goddard
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2000WO-US022031
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CC of human microvascular endothelial cells, for modulating the uptake of CC glucose or FPA by skeletal muscle cells or adipocyte cells, for Stimulating differentiation of adipocyte cells, for stimulating CC proliferation of or gene expression in pericyte cells, for stimulating CC the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating CC various bone and/or cartilage disorders such as sports injuries and CC arthritis. PRO polypeptides which stimulate the release of proteoglycans CC from cartilage defects, osteoarthritis and rheumatoid arthritis. PRO colypeptides are useful for treating various mammalian haemoglobin-cassociated disorders such as various thalassaemias and conditions which CC may benefit from enhanced local immune system cell infiltration. This caseociated disorders such as various thalassaemias and conditions which CC sequence represents a human PRO polypeptide of the invention. Note: The CC sequence data for this patent is also available in electronic format from CC USPTO at segdata.uspto.gov/sequence.html.
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Best Local S
Matches 285
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241
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        285
                                                                                                                                                          GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                                                     GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                                                                                                                                                                                                               MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                                                                    KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
  PNNSCYSAGIAKLEEGDELQLAI PRENAQISLDGDVTFFGALKLL
                                    PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                               KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                                                                                                                                                                                                                                                          MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
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Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; transcer; adrenal; lung; colon; breast; prostate; rectum; kidns liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; Plymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disports injury; proteoglycan; articular cartilage defect; osts rheumatoid arthritis; haemoglobin-associated disorder thalass immune system cell infiltration.
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                                                                         US2003082760-A1
                                                                                                    Homo sapiens.
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                                                                                                                                                                                                                                                                                                   PRO
                                                                                                                                                                                                                                                                                                   polypeptide #12
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                                                                                                                                                                                                                                       kidney;
                                                                                                                                                              osteoarthritis;
                                                                                                                                                                                                                                                         tumour;
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cervix;

12-APR-2002; 2002US-00121056

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The invention relates to isolated human PRO polypeptides (secreted and cransmembrane polypeptides) and the polypucleotides encoding them. The CC invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis and polypucleotides are useful in man blood, a method for stimulating the release of tumour necrosis of detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polypucleotides are useful in molecular biology, including uses as complying probes, in chromosome and gene mapping, in generating the preparing PRO polypeptides by recombinant techniques and in generating enther transgenic animals or knock-out animals which are cuseful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a combinant microvascular endothelial cells or adipocyte to the polypeptides or cantibodies, such as tumours, for stimulating and inhibiting proliferation of for gene expression in pericyte to the polypeptides or collisteration of or gene are useful sor adipocyte cells, for stimulating the uptake of collisteration of or gene expression in pericyte cells, for stimulating the public cells, for stimulating the polypeptides or antibodies are useful for treating sporting cells, for stimulating cells, for stimulating cells, for stimulating the uptake of cells, for inducing endothelial cell tube formation and for treating conditions which are supported are useful for treating sports-related joint problems, cells for a cartilage are useful for treating sports-related joint problems, cells of cartilities are also useful for treating sports-related joint problems, cells of cartilities are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which cells appeared to the problems are also useful for treating various mammalian haemoglobin-sport
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Gerritsen ME,
Smith V, Stew
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ME, Goddard .
Stewart TA,
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
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02-DEC-1999; 02-DEC-1999; 16-DEC-1999; 20-DEC-1999; 20-DEC-1999;

01-DEC-1999; 01-DEC-1999; 02-DEC-1999;

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16-SEP-1998; 17-SEP-1998; 07-OCT-1998; 29-OCT-1998; 29-OCT-1998; 20-NOV-1998; 01-DEC-1998; 01-DEC-1998;

98WO-US019437. 98WO-US021141. 98WO-US022991. 98WO-US022992.

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14-JUL-1998; 28-AUG-1998; 10-SEP-1998;

14-SEP-1998; 14-SEP-1998; -SEP-1998;

98WO 9W86 0W86

05-JAN-2000; 06-JAN-2000; 06-JAN-2000;

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28 - FEB - 2001;

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Best Local Simi
Matches 285;
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Tumour necrosis factor alpha release; TNF-alpha release;
glucose uptake modulator; FFA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator; cell differentiation tumoulator; cytokine release stimulator; tumo
lung tumoue; colon tumour; breast tumour; prostate tumour; rectal
cervical tumour; liver tumour; chromosome mapping; gene mapping;
renarrapy; chromosome identification; chromosome marker.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       standard;
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                                                                                                                                                                                                                                                                                    2002US-00147492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
         97WO-USO05230

98WO-USO12456

98WO-USO17888

98WO-USO17888

98WO-USO19093

98WO-USO19093

98WO-USO19077

98WO-USO1930

98WO-USO19370

98WO-USO19330

98WO-USO2992

98WO-USO2991

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98WO-USO22991

98WO-USO2291
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No. 1
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1.3e-144;
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          05-UN-1999
10-MAR-1999
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15-SEP-1999
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20-DEC-
         99WO-US005106
99WO-US005108
99WO-US005109
99WO-US012753
99WO-US012753
99WO-US012759
99WO-US020514
99WO-US022109
99WO-US028311
99WO-US028311
99WO-US028311
99WO-US0283564
99WO-US028564
99WO-US028564
99WO-US030099
99WO-US030091
99WO-US030091
99WO-US030091
99WO-US030737
2000WO-US006520
2000WO-US0065214
2000WO-US00666220
2001US-00854208
2001US-00866028
2001US-00866028
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                                                                                                                                                                                                                                                                                                                                                                                                     CC transmembrane) polypeptides (I). (I) is useful for stimulating the uptake of TNP-alpha from human blood, for modulating the uptake of CC glucose of TNP-alpha from human blood, for modulating the uptake of CC glucose or FFA by skeletal muscle cells or addipocyte cells, for Stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte CC cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating proliferation of inner ear utricular supporting cells, for stimulating the differentiation of adipocyte cells, for stimulating proliferation of inner ear utricular supporting the binding of CC are tells, for stimulating proliferation of tumour in hibiting the differentiation of factor VIIA, for inhibiting the protecting cells, for stimulating proliferation of the only oncleotide probes cells, for stimulating genomic and cDNA nucleotide sequences or sequences or interaction. A polymcleotide (II) encoding (I) is useful in chromosome cell and sequence of the propension of antisense RNA and DNA, in the cell cells the propension of antisense rating transgenic animals or chromosome propension and for generating transgenic animals or chromosome earliet, and for generating cells, in second in specific cells, tissues or serum, and for detecting the supersion of RNO polymental cells tissues or serum, and for cell sources. (I) and (II) are useful for tissue typing. This is the amino cell collection of a novel human secreted and transmembrane PRO
                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 285
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09-JUL-2001;
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20-JUN-2001;
21-JUN-2001;
22-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New secreted and transmembrane PRO polypeptide useful for detecting the presence of tumor in a mammal, or modulating the uptake of glucose or free fatty acid by skeletal muscle cells or adipocyte cells.
                                                                                                                                                                                                                                                                                                                                                  Sequence 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I), (I) is useful for stimulating the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Baker KP, Beresini M,
Gerritsen ME, Goddard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 12; Fig 24; 638pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GETH ) GENENTECH INC
                                                                                                                                                                                                                                       Local 285;
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GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                      LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                 LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                                                                                     MDDSTEREQSRLTSCLKKREEMKLKBCVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                                                                                                                              MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
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2001WO-US021066
2001WO-US021736
2001WO-0908827
2001US-00924419
2001US-00927796
2001US-00931836
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2001WO-US019692.
2001US-00887879.
                                                                                                                                                                                                                                                      100.0%; Score 1451; DB 6;
100.0%; Pred. No. 1.3e-144;
tive 0; Mismatches 0;
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A, Godowski PJ, Gurney AL, Sht
                                                                                                                                                                                                                                                                                               Length
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Sherwood
                                                                                                                                                                                                                                                                                                    285;
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01-DEC-1999
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14-MAY-1999;
02-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FPA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; arricular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
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08-MAR-
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10-SEP-1998
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                                                     99WO-US021547.
99WO-US023089.
99WO-US028214.
99WO-US028313.
99WO-US028409.
                                                                                                                                                 99WO-US020111.
99WO-US020594.
99WO-US020944.
99WO-US021090.
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99WO-US008615.
99WO-US010733.
99WO-US012252.
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98WO-US024855.
98WO-US025108.
99WO-US000106.
99WO-US005028.
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98WO-US021141.
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11-AUG-2000

23-AUG-2000

24-AUG-2000

08-NOV-2000

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20-DEC-2000

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21-EEB-2001

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28-FEB-2001
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22-DEC-1999;
30-DEC-1999;
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05-JAN-2000;
06-JAN-2000;
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25-MAY-2001

01-JUN-2001

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09-JUL-2001

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18-JUL-2001
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14-MAR-2001;
22-MAR-2001;
05-APR-2001;
10-MAY-2001;
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30-MAR-2000;
17-MAY-2000;
22-MAY-2000;
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Baker KP,
Gerritsen
Smith V,
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2-DEC-1999;
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 n ME, Goddard;
Stewart TA,
                                                                                               2001US-00886342.
2001US-0089692.
2001US-00897879.
2001WO-US020116.
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2001WO-US021706.
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Deforge L, Desnoyers L,
A, Godowski PJ, Gurney
Tumas D, Watanabe CK, W
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Novel isolated, secreted and transmembrane PRO polypeptides e.g. PRO1801 and PRO1114, useful in the preparation of a medicament for treating a condition responsive to PRO polypeptide, and as therapeutic agents e.g. vaccines.

English.

Colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as complying the property of the polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful creagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or medicament for treating anomalism of modulating proliferation of human microvascular endothelial cells, for modulating the uptake of compositions of or gene expression in pericyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating cells or gene expression in pericyte cells, for stimulating cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and cartilage are useful for treating sports-related joint problems, from cartilage are useful for treating sports-related joint problems, and benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypeptides of the invention. Note: The sequence data for this patent is also available in electronic format from USPFTO at segdata.uspto.gov/sequence.html. transmembrane polypeptides) and the polypucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The invention relates to isolated human PRO polypeptides (secreted

KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPS 0 Score 1451; DB 7; Pred. No. 1.3e-144; ; Mismatches 0; VRSSKDGKLLAATLLLALLSCC Length Indels 285 285 0; COMMETL Gaps 240 180 180 120 120 60

y AL, She wood WI,

(GETH)

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The invention relates to isolated human PRO polypeptides (secreted and Ct transmembrane polypeptides) and the polypucleotides encoding them. The cinvention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the prosence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as complying the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breasting are useful in molecular biology, including uses as complying and but and single properties by recombinant techniques and in generating either transgenic animals or knock-out animals which are cuseful in the development and screening of the appendically useful contributions. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating of the polypeptides or stimulating the uptake of stimulating differentian muscle cells, for modulating the uptake of spinose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the uptake of colon colon colon of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating cells or colon and colon colon and cell tube formation and for treating cells or colon and cell tube formation and for treating cells or colon and cell tube formation and for treating cells or colon and cell tube formation and cell treating cells or ce
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18-OCT-1999; 99US-00403297.
30-NOV-1999; 99WO-US028313.
18-FEB-2000; 2000WO-US004342.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence tapsesents a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from the USPTO website at seqdata.uspto.gov.
                                                                                                                                                                                                                                                                                  lung tumoue; colon cervical tumour; li
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Pred. No. 1.3
); Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .3e-144;
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240 240 180 180 120 120 60

(GETH) GENENTECH INC

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Claim 12; Fig 24; 637pp; English.
                                                            New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide, for preparing a composition for treating e.g., tumor, or for tissue
                                                                                                                                                                                                               Gerritsen
                                                                                                                                                                                                                                   Baker KP,
                                                                                                                                                  2003-786912/74.
                                                                                                                                                                                                               Beresini M,
ME, Goddard
                                                                                                                                                                                        Stewart
                                                                                                                                                                                        A, Godov
Tumas D,
                                                                                                                                                                                        Deforge L, Desnoyers L, Filva:
A, Godowski PJ, Gurney AL, She
Tumas D, Watanabe CK, Wood WI,
                                                                                                                                                                                                               Filvaroff E,
L, Sherwood S;
                                                                                                                                                                                                                                   Gao W;
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The invention describes 305 nucleic acids encoding PRO (secreted and CC transmembrane) polypeptides (I). (I) is useful for stimulating the crelease of TNF-alpha from human blood, for modulating the uptake of CC glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation of or gene expression in perioric cells, for stimulating the proliferation of or gene expression in perioric cells, for stimulating the proliferation of or proteoglycans from cartilage, for stimulating the proliferation of T-lymphocyte cells, for stimulating of A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, cells, for stolating genomic and cDNA nucleotide probes care useful for isolating genomic and cDNA nucleotide sequences or antisense probes. (I) is also useful as therapeutic agent. PRO is useful in the and gene mapping, in generation of antisense RNA and DNA, in the proparation of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and concerning of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating transgenic assays for PRO, e.g. detection is assays for proparation in susception in diagnostic assays for PRO, e.g. detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO

Sequence 285 AA;

망	Qy	뫄	Qy	В	Qy	Db	γQ	Дb	Ş	Matcl	Quer
241 PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL 285	241 PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL 285	181 KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL 240	181 KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL 240	121 GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE 180	121 GEGNSSQNSRNKRAVQGÞEETVTQDCLQLIADSETPTIQKGSYTFVÞWLLSFKRGSALEE 180	61 LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP 120	61 LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP 120	1 MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC 60	1 MDDSTEREOSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLILALLSCC 60	ative 0;	Query Match 100.0%; Score 1451; DB 7; Length 285;

detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO

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cells, for stimulating the release of proteoglycans from cartilage, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of I-lymphocyte cells, for stimulating of the release of a cytokine from PBMC cells, for inhibiting the binding of cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour. The oligonucleotide probes are useful for isolating genomic and cDNn nucleotide sequences or antisense probes. (I) is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding interaction. A polynucleotide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the preparation of therapeutically useful in the development and considerable contentification, as chromosome marker, and for generating encoding (I)-antibody is useful in diagnostic assays for PRO, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-JUN-2000;
01-DEC-2000;
19-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 glucose uptake modulator; FFA uptake modulator; cell proliferation stimulator; cell differentiation stimulator; cell differentiation stimulator; cell differentiation inihibitor; cytokine release stimulator; tumour; lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour; cervical tumour; liver tumour; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the release of TNF-alpha from human blood, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New PRO nucleic acid, useful for e.g., tumor or for tissue typing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Baker KP, Beresini M,
Gerritsen ME, Goddard
Smith V, Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; secreted and transmembrane protein; PRO; Tumour necrosis factor alpha release; TNF-alpha release;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 12; Fig
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2001US-00028072.
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Tumas D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Deforge L, Desnoyers L, Filvaroff E, Ga, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               preparing a composition for treating
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Best Local Similarity 100
Matches 285; Conservative
  12-UUN-1997
12-UUN-1998
14-UUL-1998
28-AUG-1998
10-SEP-1998
14-SEP-1998
14-SEP-1998
14-SEP-1998
14-SEP-1998
16-SEP-1998
17-SEP-1998
107-OCT-1998
29-OCT-1998
20-OCT-1998
20-OC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; secreted and transmembrane protein; PRO; Tumour necrosis factor alpha release; TNF-alpha release; glucose uptake modulator; FPA uptake modulator; cell proliferation stimulator; cell differentiation stimulator; cell differentiation inhibitor; cytokine release stimulator; tumo lung tumoue; colon tumour; breast tumour; prostate tumour; rectal cervical tumour; liver tumour; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-MAR-2003
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     98WO-US012456

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98WO-US019824

98WO-US019093

98WO-US0190177

98WO-US0193177

98WO-US0193179

98WO-US0193179

98WO-US0219417

98WO-US0221941

98WO-US0221941

98WO-US022194

98WO-US022106

98WO-US025108

98WO-US055100

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Pred. No. 1.3e-144;
); Mismatches 0;
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     13-SEP 1999
15-SEP 1999
15-SEP 1999
15-SEP 1999
29-NOV 1999
30-NOV 1999
30-NOV 1999
01-DEC 1999
02-DEC 1999
03-DEC 1999
04-DEC 1999
05-JAN 2000
06-JAN 2000
07-MAR-2000
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02-JUN-
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2000WC-US02352

2000WC-US023328

2000WC-US030952

2000WC-US030873

2000WC-US032678

2000WC-US034956

2000WC-US006666

2001WC-US006666

2001WC-US006666

2001WC-US006666

2001WC-US006666

2001WC-US006666

2001WS-0080869

2001WS-00854280

2001WS-00866034

2001WS-00886342

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2000WO-US005746.

2000WO-US005819.

2000WO-US006319.

2000WO-US006884.

2000WO-US007377.
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2000WO-US015264.
2000WO-US020710.
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2000WO-US008439.
2000WO-US013705.
2000WO-US014042.
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2000WO-US004341
2000WO-US004342
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2000WO-US000277
2000WO-US000376
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99WO-USO28301.
99WO-USO28634.
99WO-USO28551.
99WO-USO28565.
99WO-USO28565.
99WO-USO30995.
99WO-USO30991.
99WO-USO30991.
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99WO-US021090.
99WO-US021547.
99WO-US023089.
99WO-US028214.
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99WO-US012252.
99WO-US020111.
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99WO-US031274
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                                                                                                                                                                                                                                                                                                                                                                                                                             The invention describes 305 nucleic acids encoding PRO (secreted and CC transmembrane) polypeptides (I). (I) is useful for stimulating the CC release of TNF-alpha from human blood, for modulating the uptake of CC glucose or FFPA by skeletal muscle cells or adipocyte cells, for Stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of Tymphocyte cells, for detecting the release of a cytokine from PBMC cells, for inhibiting the binding of the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour. The oligonuclectide probes creating for isolating genomic and cDNA nucleotide sequences or car useful for isolating genomic and cDNA nucleotide sequences or can demand the properation of provided in binding can expensive to identify other proteins or molecules involved in binding can expensive to identify other proteins or molecules involved in binding can expensive to identify other proteins or molecules involved in the correspondence of therapeutically useful as therapeutic agent. PRO is useful in the development and conceptually useful reasonable for generating transgenic animals or chromosome therapeutically useful as the development and conceptually as conceptually as conceptually and for generating of antisense or serum, and for generating conceptually as conceptual
                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                      Query Match .
Best Local Similarity
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09-JUL-2001;

18-JUL-2001;

06-AUG-2001;

09-AUG-2001;

16-AUG-2001;

19-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                              Sequence 285
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                                                                                                GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                 LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
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Stewart
                                                                          GEGNSSONSRNKRAVOGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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Œ, Goddard
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7 2001WO-US021735.
7 2001WS-00908827.
7 2001US-00924419.
7 2001US-00931836.
7 2001US-00931836.
7 2001US-00028072.
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Tumas
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, Godowski PJ, Gurney /
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Pred. No. 1.3e-144;
                                                                                                                                                                                                                                                                                                      Mismatches
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L, Sherwood S;
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypucleotides encoding them. The cinvention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polypucleotides are useful in molecular biology, including uses as the properties, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polypucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or

e.g.,

New PRO nucleic acid, useful for

preparing

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composition

tumor or for tissue typing

N-PSDB; ADB28124

2003-777202/73.

Gerritsen

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Stewart TA, ă

Goddard

IA, Go Tumas

Sherwood

Zhang 2

Claim 12; Fig

24; 637pp; English.

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02-JUN-1999;
25-AUG-1999;
30-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; condrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
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01-DEC-2000;
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                                                                                                                                                                                                                                                                                 Baker KP,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   immune system cell infiltration.
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99US-00380137.

99WO-US028313.

2000WO-US028439.

2000WO-US032678.

2001US-00028072.
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A, Godowski PJ, Gurney AL, She
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Best Local S
Matches 285
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                                                                                                                                                                                                                                                                Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; pericyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
24-APR-2002; 2002US-00131836.
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Pred. No. 1.3e-144;
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                                                                                                                                                                                                                                                                                                                     The invention relates to isolated human PRO polypeptides (secreted and C transmembraine polypeptides) and the polynucleotides encoding them. The cinvention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis C factor-alpha (TNP-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The C polynucleotides are useful in molecular biology, including uses as C hybridisation probes, in chromosome and gene mapping, in generating C antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in C generating either transgenic animals or knock-out animals which are C useful in the development and screening of therapeutically useful c reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or stimulating and inhibiting proliferation of sumon microvascular endothelial cells or animals the uptake of C glucose or FRA by skeletal muscle cells or animals for stimulating the uptake of C proliferation of or gene expression in pericyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating c repoliferation of or gene expression in pericyte cells or T-lymphocyte cells, for inducing endothelial cells tube formation and for treating c various bone and/or cartilage disorders such as sports related joint problems, c articular cartilage disorders such as sports related joint problems, c associated disorders such as various thalassaemias and conditions which c associated disorders such as various thalassaemias and conditions. This sequence data for this patent is also available in electronic format from the bedience data for this patent is also available in electronic format from the bedience data for this patent is also available in electronic format from the co
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GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                                  LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFBPPAP
                                                                              LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
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Stewart TA,
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; 2000WO-US030873.
; 2000WO-US032678.
; 2000US-00028072.
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Goddard A, Godowski PJ, Gurney
Tumas D, Watanabe CK, Wood WI,
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99WO-USO21547

99WO-USO23089

99WO-USO28811

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99WO-US010733.
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99WO-US020594.
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98WO-US025108.

99WO-US0021106.

99WO-US005028.

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Gerritsen
Smith V,
                   WPI; 2003-540684/51.
N-PSDB; ADA76628.
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1 ME, Goddard
Stewart TA,
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2001WO-US017092.
2001WS-00872035.
2001WS-008826342.
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2001US-US0201166.
2001US-0090882732.
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2000WO-US030973.
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2001WO-US006666.
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2001US-00816744.
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Tumas D,
                                                                       Deforge L, Desnoyers L, Filva
A, Godowski PJ, Gurney AL, Sh
Numas D, Watanabe CK, Wood WI,
                                                                                         Filvaroff E,
L, Sherwood S;
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New secr as PRO, cardiac

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CC hybridisation probes, in chromosome and gene mapping, in generating of hybridisation probes, in chromosome and gene mapping, in generating of the used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful creagents. The PRO polypeptides or antibodies are used in preparing a committed condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of comproduces or FRA by skeletal muscle cells, for modulating the uptake of comproduces or FRA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear urticular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobing associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. Note: The sequence represents a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from USPTO at sequence had a spatent is also available in electronic format from useful contents.
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Novel 20-NOV-2003 human secreted and transmembrane (first entry) protein PRO738

Human; secreted and transmembrane protein; PRO; Tumour necrosis factor alpha release; TNT-alpha release; glucose uptake modulator; PFA uptake modulator; cell proliferation stimulator; cell differentiation stimulator; cell differentiation inhibitor; cytokine release stimulator; tumour; lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour; cervical tumour; liver tumour; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker.

Homo sapiens

US2003073213-A1

31-MAR-1997; 12-JUN-1998; 14-JUL-1998; 17-APR-2002; 17-APR-2003. 2002US-00124819

07-OCT-1998
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11-DEC 14-SEP-1998; 16-SEP-1998; 17-SEP-1998; 28-AUG-1998; 10-SEP-1998; 14-SEP-1998; 14-SEP-1998; 98WO-US019437. 98WO-US021141. 98WO-US022991. 99WO-US010733. 99WO-US010733. 99WO-US012252. 98WO-US022992. 98WO-US024855. 98WO-US025108. 99W0 99W0-99WO-US020944 99WO-US020111 99WO-US020594 98WO-US019177 98WO-US019330 98WO-US019094 98WO-US019093 98WO-US018824 -US005190 -US005028

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99WO-US031243.
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24-AUG-2000;
08-NOV-2000;
The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the release of TMF-alpha from human blood, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the release of proteoglycans from cartilage, stimulating the proliferation of inner ear utricular supporting cells,
                                                                                                                                                                                                                                                                                                                                                                                                                   Gerritsen
Smith V,
                                                                                                                                                                                                                                                           New secreted and transmembrane PRO polypeptides and in gene therapy, detecting the presence of tumor in modulating the uptake of glucose or free fatty acid
                                                                                                                                                                                                      Claim
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DB; ADA88258.
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ME, Goddard
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2000WO-US03328
2000WO-US030952
2000WO-US032678
2000WO-US034956
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2001WO-US006566
2001US-00806692
2001US-00806692
2001US-00854208
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2000WO-US006319.
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2001US-00931836.
2001US-00028072.
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2000WO-US020710.
2000WO-US022031.
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1, Godowski PJ, Gurney J
Tumas D, Watanabe CK, W
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Wood WI,
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L, Sherwood S;
                                                                                                                                                                                                                                                                  a mammal, or
by skeletal muscle
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CC for stimulating the proliferation of T-lymphocyte cells, for stimulating the release of a cytokine from PBMC cells, for inhibiting the binding of CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte CC cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes CC are useful for isolating genomic and cDNA nucleotide sequences or antisense probes. (I) is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding CC in assays to identify other proteins or molecules involved in binding CC and gene mapping, in generation of antisense RNA and DNA, in the preparation of PRO polypeptide, for generating transgenic animals or CC extensions of therapeutically useful in the development and CC extensions of therapeutically useful reagents, in gene therapy, for CC chromosome identification, as chromosome marker, and for generating CC affinity purification of PRO is useful in diagnostic assays for PRO, e.g. detecting its expression in specific cells, tissues or serum, and for calf sequence of a novel human secreted and transmembrane PRO
Human; PRO; secreted polypeptide; transmembrane polypeptide; trumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation, bone disorder; cartilage disord sports injury; proteoglycan; articular cartilage defect; osteoar preumatoid arthritis; haemoglobin-associated disorder thalassaem
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285; Conser
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Pred. No. 1.3
0; Mismatches
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L.3e-144;
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          ct; osteoarthritis; thalassaemia;
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                                                                        disorder;
                                                                                                                                                                                                                                           tumour;
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                                                                                                                                                                                                                                                                                                                                                                  CC hybridisation probes, in chromosome and gene mapping, in generating according to the used in preparing PRO polypeptides by recombinant techniques and in CC generating either transgenic animals or knock-out animals which are CC useful in the development and screening of therapeutically useful CC reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of intervascular endothelial cells, for modulating the uptake of CC glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating CC proliferation of or gene expression in pericyte cells, for stimulating CC the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating CC articular supporting cells or articular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating CC articular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating carticular supportion and for treating CC articular oartilage defects, osteoarthritis such as sports injuries and CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-cassociated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. Note: The sequence data for this patent is also available in electronic format from CC USPTO at seedata uspto. GC as second conditions also available in electronic format from CC useros such as also available in electronic format from CC useros at seedata uspto.
                                                                                                                                                                                                                        Query Match
Best Local S
Matches 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TMF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or PRO4978, useful in molecular biology, chromosome and gene mapping generating antisense RNA and DNA, and in gene therapy.
                                                                                                                                                                                                                                                                                                              Sequence 285
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01-DEC-2000; 2000WO-US032678
19-DEC-2001; 2001US-00028072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                colon, breast, prostate, rectal, kidney, cervical and liver tumour polynucleotides are useful in molecular biology, including uses as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 12; Fig 24; 666pp; English.
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                                                                                                                                                                                                                           Local Sines 285;
121
                                                                                     61
                                                                                                                                                                                                                                              Similarity
GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                              LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                              MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
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                                                                                                                                                                                                                                                                                                                                                         seqdata.uspto.gov/sequence.html.
                                        LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
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Stewart
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ME, Goddard
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A, Godowski PJ, Gurney AL, Sh.
Tumas D, Watanabe CK, Wood WI,
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                                                                                                                                                                                                                                         Score 1451; DB 7; Pred. No. 1.3e-144;
                                                                                                                                                                                                                        Mismatches
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AL, Sherwood S;
Zhang Z;
                                                                                                                                                                                                                                                                 Length
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                                                                                                                          24-OCT-1997;
24-OCT-1997;
24-OCT-1997;
27-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthr; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
                                                                                                                                                                     24-0CT-1997
24-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human PRO polypeptide #12.
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12-MAR 1998
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Best Local Similarity
Matches 285; Conser
31-MAR-1997
12-JUN-1998
14-JUL-1998
28-AUG-1998
10-SEP-1998
14-SEP-1998
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12-JAN-1999;
20-JAN-1999;
01-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adremal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; Prlymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; hemmatoid arthritis; hamoglobin-associated disorder thalassaemia; immune system cell infiltration.
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|llarity 100.0%;
|Conservative (
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  97WO-US005230
98WO-US012456
98WO-US012455
98WO-US017888
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99US-0115733P.
99US-0116533P.
99US-0118210P.
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GENENTECH INC.
                         2001US-00887879.
2001WO-US0210116.
2001WO-US021035.
2001US-00908827.
2001US-00908827.
2001US-00927796.
2001US-00931836.
2001US-00028072.
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2001US-00886342
2001WO-US019692
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Baker KP, , Beresini M, n ME, Goddard Stewart TA, Tumas D, Deforge i, Desnoyers I, Filvaroff E, G A, Godowski PJ, Gurney AI, Sherwood S; Fumas D, Watanabe CK, Wood WI, Zhang Z; Gao Σ

WPI; 2003-695925/66. N-PSDB; ADA66644.

Novel secreted and transmembrane PRO polypeptides useful for stimulating release of tumor necrosis factor-alpha from human blood and detecting the presence of a tumor in a mammal

Claim 12; Fig 24; 660pp; English.

CC hybridisation probes, in chromosome and gene mapping, in generating cantisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful creagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating proliferation of plucose or PRA by skeletal muscle cells, for modulating the uptake of cells; for stimulating differentiation of adipocyte cells, for stimulating the uptake of cells, for inducing endothelial cell tube formation and for treating cells, for stimulating cells, for inducing endothelial cell tube formation and for treating cartities bone and/or cartilage disorders such as sports injuries and cartitities. PRO polypeptides which stimulate the release of proteoglycans from cartilage detects, osteoarthritis and rheumatoid arthritis. PRO carticular cartilage detects, osteoarthritis and rheumatoid arthritis. PRO carticular supports related joint problems, cardinage benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypeptide of the invention. Note: The constitution of attention sports sequence data for this patent is also available in electronic format from USPFO at sequence sports sequence.html. The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypuchectides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung colon, breast, prostate, rectal, kidney, cervical and liver tumour; polymuclectides are useful in molecular biology, including useful in molecular biology. (e.g. adrenal, lung, cal and liver tumours).

Sequence 285 Ā

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                                       Query Match
Best Local
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                                        Similarity
MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                Conservative
                                       100.0%;
                                0
                              Score 1451; DB /,
Pred. No. 1.3e-144;
                                 Indels
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61 LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP

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30-NOV-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                Gerritsen ME, Goddard Smith V, Stewart Th
The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis
                                                                                                                                                                                                     New secreted and transmembrane PRO polypeptides and nucleic acids, useful in gene therapy, as diagnostic markers for the presence of a disease condition, or as therapeutic targets for treating tumors, diabetes, obesity or arthritis.
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Tumas
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
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Best Local
           Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; t cancer; adrenal; lung; colon; breast; prostate; rectum; kidn liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
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The invention relates to isolated human PRO polypeptides (secreted and CC transmembrane polypeptides) and the polynucleotides encoding them. The CC invention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis CC factor alpha (TNP-alpha) from human blood, a method for stimulating the prosition or differentiation of chondrocyte cells and a method for CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polynucleotides are useful in molecular biology, including uses as CC antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating conditions are used in preparing PRO polypeptides by recombinant techniques and in caseful in the development and screening of therapeutically useful cantisense the PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or stimulating anticrovascular endothelial cells, for modulating the uptake of CC glucose or FPA by skeletal muscle cells, for modulating the uptake of CC polypeptides or gene expression in pericyte cells, for stimulating conditions are provided to the proliferation of or gene expression in pericyte cells, for stimulating conditions are provided arthritis. PRO polypeptides which stimulate the release of proteoglycans of from cartilage are useful for treating sports related joint problems, completed disorders such as such as supporting and for treating conditions mammalian haemoglobin-associated disorders such as various thalassemias and conditions which are such as separation. This captures entire a human PRO polypeptides of the invention. This captured at a support of the invention. Whish captures captured data or this patent is also available in electronic format from USPFTO at segdata.uspto.gov/sequence.html.
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01-DEC-2000; 2000WO-US032678
19-DEC-2001; 2001US-00028072
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2003-755067/71.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Beresini M,
ME, Goddard
Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99WO-US020111
99US-00403297
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Deforge L, Desnoyers L, Filvaroff E, G
A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gao
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Sequence

285

Similarity

Score Pred.

1451; No. 1

.3e-144 DB

Length

The invention describes 305 nucleic acids encoding transmembrane) polypeptides (I). (I) is useful for release of TNF-alpha from human blood, for modulati

modulating the

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cell proliferation stimulator; cert water consideration inhibitor; cytokine release stimulator; tumour; cell differentiation inhibitor; cytokine release stimulator; tumour; lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tum cervical tumour; liver tumour; chromosome mapping; gene mapping; qene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                                                           Smith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               glucose uptake modulator; FFA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
                                                                                            Claim 12;
                                                                                                                                             e.g.,
                                                                                                                                                                                                                                                                                                                    Gerritsen
                                                                                                                                                                                                                                                                                                                                                                                       (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-MAY-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-MAY-1998;
                                                                                                                                           PRO nucleic acid, useful for , tumor or for tissue typing
                                                                                                                                                                                                                                            2003-786915/74.
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                                                                                            Fig
                                                                                                                                                                                                                                                                                           Stewart
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ME, Goddard
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99US-00380138.
2000WO-US032678.
2000US-00028072.
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                                                                                                                                                                                                                                                                                             A, Go
Tumas
                                                                                                                                                                                                                                                                                                                    Deforge L,
1, Godowski
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                                                                                                                                                                                                                                                                                             Ö
                                                                                                                                                                  preparing
                                                                                                                                                                                                                                                                                             L, Desnoyers L,
ski PJ, Gurney J
Watanabe CK, W
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                                                                                                                                                                       a composition for treating
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                                                                                                                                                                                                                                                                                                y AL,
Wood
                                                                                                                                                                                                                                                                                             Filvaroff E,
AL, Sherwood S
ood WI, Zhang
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                                                                                                                                                                                                                                                                                        1 S;
                                                                                                                                                                                                                                                                                                                                                 Gao W;
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RESULT 104
ADB15064
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local !
Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
                                                                                                                                                                                                                                                                  Human PRO polypeptide #12.
                                                                                                                                                                                                                                                                                                                                                                                                                        ADB15064 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 285 AA;
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Pred. No. 1.3e-144;
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                              osteoarthritis;
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The invention relates to isolated human PRO polypeptides (secreted and Ct transmembrane polypeptides) and the polypucleotides encoding them. The Ci invention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis CC factor-alpha (TWF-alpha) from human blood, a method for stimulating the prosition or differentiation of chondrocyte cells and a method for CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polymucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating entire transgenic animals or knock-out animals which are CC useful in the development and screening of therapeutically useful certaing either transgenic animals or knock-out animals which are CC useful in the development and screening of therapeutically useful cantionate. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of for gene expression in pericyte cells, for stimulating cells or responsive to the polypeptides or stimulating and inhibiting proliferation cc proliferation of or gene expression in pericyte cells, for stimulating proliferations of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating cells or T-lymphocyte cells, for stimulate the proliferation of interesting the proliferation of treating sports related joint problems, the proliferation of treating sports related joint problems, second associated disorders such as various thalasseemias and conditions which may benefit from enhanced local immune system cell infiltration. This cequence data for this patent is also available in electronic format from the sequence data for this patent is also available in electronic format from the sequence of the data are the color of the monoglobin color of the monoglobin color of
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30-MAY-2000;
01-DEC-2000;
19-DEC-2001;
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Gerritsen ME, Goddard
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25-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRO nucleic acid, useful for producing a recombiannt PRO polypeptide for manufacturing a medicament for diagnosing or treating tumor.
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99US-00380137.
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A, Godowski PJ, Gurney AL, She
Tumas D, Watanabe CK, Wood WI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Filvaroff E,
L, Sherwood S;
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Gao

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Sequence 285 AA;

Matches Query Match Best Local al Similarity 285; Conser Conservative 100.0%; 0, Score 1451; Pred. No. 1.3 0; Mismatches .3e-144; DB Indels 0

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RESULT 105
ADB3831
AC ADB383
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14-SEP-1998
14-SEP-1998
14-SEP-1998
17-SEP-1998
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Tumour necrosis factor alpha release;
glucose uptake modulator; FPA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumour;
lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
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  98WO-US022992
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99WO-US012733
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99WO-US020111
99WO-US020594
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99WO-US021194
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98WO-US014552.
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101-DEC-1999
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99WO-USO30591.
99WO-USO30991.
99WO-USO30999.
99WO-USO31274.
99WO-USO31274.
2000WO-USO03562.
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2000WO-USO0341.
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2000WO-USO05601.
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2000WO-USO05601.
2000WO-USO05841.
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2000WS-00796498.
2001WS-00796498.
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2000WO-US014941
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2000WO-US020710
2000WO-US022031
2000WO-US023523
2000WO-US023328
2000WO-US023328
2000WO-US030873
2000WO-US030873
2000WO-US030873
      2001US-00886342.
2001US-008878792.
2001US-008878792.
2001UG-US020116.
2001WG-US021735.
2001US-00928827.
2001US-00927419.
2001US-009273836.
2001US-00931836.
2001US-00028072.
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99WO-US028214.
99WO-US028313.
99WO-US028409.
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The invention describes 305 nucleic acids encoding PRO (secreted and CC transmembrane) polypeptides (I). (I) is useful for stimulating the release of TNF-alpha from human blood, for modulating the uptake of CC glucose or FPA by skeletal muscle cells or adipocyte cells, for Stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of Tymphocyte cells, for stimulating the proliferation of for inhibiting the binding of the release of a cytokine from PBMC cells, for inhibiting the binding of the presence of tumour in a mammal. The tumour is lung, colon, breast, cristal, cervical or liver tumour. The oligonucleotide probes care useful for isolating genomic and cDMA nucleotide sequences or are useful for isolating genomic and cDMA nucleotide sequences or interaction. A polynucleotide (II) encoding (I) is useful in chromosome denentify other proteins or molecules involved in binding interaction. A polynucleotide (II) encoding (I) is useful in chromosome content animals which in turn are useful in the development and contentification, as chromosome marker, and for generating contenting the probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g. detecting its expression in specific cells, tissues or serum, and for contenting contenting the useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO
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Best Local &
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Smith V, Ste
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                                PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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A, Godowski PJ, Gurney
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Pred. No. 1.3e-144;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Watanabe CK,
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Wood WI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
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L, Sherwood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
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AC Cell d
AC Cell d
AC ADB377
AC ADB37

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Tumour necrosis factor alpha release; TNF-alpha release;
glucose uptake modulator; FFA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inihibitor; cytokine release stimulator; tumour;
lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumoervical tumour; liver tumour; chromosome mapping; gene mapping;
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01-DEC-2000;
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25-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             장
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ME, Goddard
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2000WO-US032678.
2001US-00028072.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      chromosome identification; chromosome marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US012252.
99US-00380137.
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Tumas
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1, Godowski PJ, Gurney J
Tumas D, Watanabe CK, W
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AL, Sherwood S;
Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gao W;
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Gerritsen Smith V, 2003-786938/74. Stewart

PRO nucleic acid, for manufacturing useful for preparing a recombinant PRO polypeptide a medicament for diagnosing or treating tumor.

12; Fig 24; 637pp; English

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The invention describes 305 nucleic acids encoding PRO (secreted and CC transmembrane) polypeptides (I). (I) is useful for stimulating the crelease of TNF-alpha from human blood, for modulating the uptake of CC glucose or FFA by skeletal muscle cells or adipocyte cells, for Stimulating the proliferation or differentiation of chondrocyte cells, for Stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for Stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of the cells, for inhibiting the binding of the presence of a cytokine from PBMC cells, for inhibiting the binding of A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, cells, for isolating genomic and cDNA nucleotide sequences or are useful for isolating genomic and cDNA nucleotide sequences or are useful for isolating genomic and cDNA nucleotide sequences or interaction. A polynucleotide (I) encoding (I) is also useful as therapeutic agent PRO is useful inthe gene mapping, in generation of antisense RNA and DNA, in the care consisted and gene mapping, in generation of antisense RNA and DNA, in the correction of the accuracy for chromosome identification, as chromosome marker, and for generating chromosome identification, as chromosome marker, and for generating correcting of the probability as seful in diagnostic assays for PRO, e.g.

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RESULT 107
ADB66236
ID ADB662
XX ADB662
XX NOVel
XX Human
XW Human
XW Humon
XW Gell
XW Cell
XW Cell
XW Cell
XW Cell
XW Ocerv
XW Gene
XX Homc
XX 1009
XW 1009
XW 201-1
XX 12.
PR 11.
PR 28.
PR 14.
PR 14.
PR 14.
PR 14.
PR 16.
PR 1
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Best Local Similarity
Matches 285; Conserv
            12-JUN 1997
12-JUN 1998
14-JUL 1998
28-AUG-1998
10-SEP 1998
14-SEP 1998
14-SEP 1998
14-SEP 1998
17-SEP 1998
17-SEP 1998
29-OCT 1998
29-OCT 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; secreted and transmembrane protein; PRO; Tumour necrosis factor alpha release; TWF-alpha release; glucose uptake modulator; FFA uptake modulator; cell proliferation stimulator; cell differentiation stimulator; cell differentiation stimulator; cell differentiation inhibitor; cytokine release stimulator; tumour; lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour; cervical tumour; liver tumour; chromosome mapping; gene mapping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 285
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                                                                                                                                                                                                                                                                                                                               01-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel human secreted and transmembrane protein PRO738.
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                                                                                                                                                                                                                                                                                                                                                                    US2003082689,-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                            therapy;
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                                                                                                                                                                                                                                                                                          2002US-00127831
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                98WO-US018824.
98WO-US019093.
98WO-US019094.
98WO-US019177.
98WO-US019330.
98WO-US019437.
98WO-US01941.
98WO-US022991.
98WO-US022992.
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98WO-US014552.
98WO-US017888.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                identification;
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Pred. No. 1.3e-144;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  chromosome
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                      01-DEC-1999
10-MAR-1999
11-MAR-1999
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2000WO-US000277.
2000WO-US000376.
2000WO-US003565.
2000WO-US004341.
2000WO-US004342.
2000WO-US004414.
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2000WO-US023522.
2000WO-US023328.
2000WO-US030952.
2000WO-US030873.
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2000WO-US013705.
2000WO-US014042.
2000WO-US014941.
2000WO-US015264.
2000WO-US020710.
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2000WO-US005746.
2000WO-US005811.
2000WO-US006319.
2000WO-US006884.
2000WO-US007377.
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2000US-00747259.
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2001US-00796498.
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99WO-US028214.
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99WO-US028409.
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99WO-US021090.
99WO-US021547.
99WO-US023089.
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99WO-US031243.
99WO-US031274:
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99WO-US030911.
99WO-US030999.
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98WO-US025108.
99WO-US000106.
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99WO-US028565
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99WO-US028551
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99WO-US012252
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                                                                                                                                                                                                                                                                                                  The invention describes 305 nucleic acids encoding PRO (secreted and ctransmembrane) polypeptides (I). (I) is useful for stimulating the crelease of TNF-alpha from human blood, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of roteoglycans from cartilage, for cells, for stimulating the proliferation of roteoglycans from cartilage, for stimulating the proliferation of roteoglycans from cartilage, for stimulating the proliferation of endothelial cells, for stimulating of the release of a cytokine from PBMC cells, for inhibiting the binding of the presence of tumour in a mammal. The tumour is lung, colon, breast, cretal, cervical or liver tumour. The oligonuclectide probes care useful for isolating genomic and cDMA nucleotide sequences or care useful for isolating genomic and cDMA nucleotide sequences or interaction. A polynucleotide (II) encoding (I) is useful in chromosome cand gene mapping, in generation of antisense RNA and DNA, in the creparation of FRO polypeptide, for generating transgenic animals or chromosome some interaction. The consome marker, and for generating transgenic animals or chromosome marker, and for generating transgenic animals or consome. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g. caldsequence of a novel human secreted and transmembrane PRO cold sequence of a novel human secreted and transmembrane PRO
                                                                                                                                                                                   Matches
                                                                                                                                                                                                 Query Match
Best Local
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14-JUN-2001; 2001US-008863636.
19-JUN-2001; 2001US-00886342.
20-JUN-2001; 2001WO-US019692.
21-JUN-2001; 2001WO-US0201166.
29-JUN-2001; 2001WO-US021066.
09-JUL-2001; 2001WO-US021066.
09-JUL-2001; 2001WO-US021735.
18-JUL-2001; 2001US-00908827.
16-JUL-2001; 2001US-00908827.
16-JUG-2001; 2001US-00924419.
09-AUG-2001; 2001US-00931836.
19-DEC-2001; 2001US-00931836.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-786905/74.
N-PSDB; ADB66235.
                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 12; Fig 24; 637pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerritsen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRO nucleic acid, useful for preparing a composition for treating . tumor or for tissue typing.
                                                                                                                                                                                285;
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                                  61
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                                                                                                                                                                                                   Similarity
                                                                                                                                   MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                               LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                            MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                                                                                                                                                                                                                         285
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Stewart
                                    LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Beresini M,
ME, Goddard
                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                         Ã,
                                                                                                                                                                                                 100.0%;
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A, Godowski PJ, Gurney AL, Sh
Tumas D, Watanabe CK, Wood WI,
                                                                                                                                                                                  0;
                                                                                                                                                                                                 Score 1451; DB 7;
Pred. No. 1.3e-144;
                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Filvaroff E, Ga
AL, Sherwood S;
ood WI, Zhang Z;
                                                                                                                                                                                                                Length
                                                                                                                                                                                  Indels
                                                                                                                                                                                                                    285;
                                                                                                                                                                                0
                                                                                                                                                                                Gaps
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121

GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE

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ADB89316
ID ADB893
AC ADB994
AC ADB9
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Gerritsen 1
Smith V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-AUG-1999;
02-MAR-2000;
30-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cerliver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthr: rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TMF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polypucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-AUG-1998;
02-JUN-1999;
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                                                                                                                                                                                                                                                                                                                        Claim 12; Fig
                                                                                                                                                                                                                                                                                                                                                                                                           New PRO nucleic acids and
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19-DEC-2001;
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DB; ADB89315.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Beresini M,
1 ME, Goddard
Stewart TA,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000WO-US005841.
2000WO-US008439.
2000WO-US032678.
2000US-00028072.
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                                                                                                                                                                                                                                                                                                                        24;
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99WO-US012252.
99US-00380137.
                                                                                                                                                                                                                                                                                                                     637pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Deforge L, Desnoyers L, A, Godowski PJ, Gurney I Tumas D, Watanabe CK, Wo
                                                                                                                                                                                                                                                                                                                                                                                                              encoded
                                                                                                                                                                                                                                                                                                                                                                                                              polypeptides, useful in the treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Wood WI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Filvaroff E,
L, Sherwood S;
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2002US-00123235

97WO-US005230 98WO-US012456

98WO-US017888

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CC antisense RNA and DNA and in gene therapy. The polynucleotides may also CC be used in preparing PRO polypeptides by recombinant techniques and in CC generating either transgenic animals or knock-out animals which are CC useful in the development and screening of therapeutically useful C reagents. The PRO polypeptides or antibodies are used in preparing a CC medicament for treating a condition responsive to the polypeptides or CC of human microvascular endothelial cells, for modulating the uptake of CC glucose or FRA by skeletal muscle cells or adipocyte cells, for stimulating the uptake of CC glucose or FRA by skeletal muscle cells or adipocyte cells, for stimulating CC proliferation of or gene expression in pericyte cells, for stimulating CC cells, for inducing endothelial cell tube formation and for treating CC various bone and/or cartilage disorders such as sports injuries and CC arthrits. PRO polypeptides which stimulate the release of proteoglycans CC from cartilage defects, osteoarthritis and remunation arreading sectiated disorders such as various thalassaemis and conditions which case sequence represents a human PRO polypeptide of the invention. Note: The Sequence data for this patent is also available in electronic format from CC USPFO at segdata.uspto.gov/sequence.html.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 285
                             Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; hemmatoid arthritis; hamoglobin-associated disorder thalassaemia; immune system cell infiltration.
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   Homo sapiens
                                                                                                                                                                                                                                      04-DEC-2003
                                                                                                                                                                                                                                                                                                 ADB90048 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                         181
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                                                                                                                                                                                                    PRO polypeptide #12.
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Pred. No. 1.3e-144;
; Mismatches 0;
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   10 APR-1999
11-MAY-1999
02-UUN-1999
13-SEP-1999
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13-SEP-1999
15-SEP-1999
15-SEP-1999
15-SEP-1999
15-SEP-1999
16-DEC-1999
10-DEC-1999
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10-DEC-1999
10-DEC-1999
10-DEC-1999
11-FEB-2000
11-MAR-2000
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29-OCT-1998;
29-OCT-1998;
20-OCV-1998;
01-DEC-1998;
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17-SEP-1998;
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08-MAR-1999;
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99WO-US023089. 99WO-US028214. 99WO-US028313. 99WO-US028409.

99WO-US021547 99WO-US020944 99WO-US020594 99WO-US018615 99WO-US010733 99WO-US012252

99WO-US005028 99WO-US005190 98WO-US025108 99WO-US000106 98WO-US022991 98WO-US022992 98WO-US019437 98WO-US019094 98WO-US019177

98WO-US021141

98WO-US024855

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99WO-US031243: 99WO-US031274: 2000WO-US000219:

99WO-US030720 99WO-US030999 99WO-US030095 99WO-US028564 99WO-US028565 99WO-US028551 99WO-US028301 99WO-US028634

2000WO-US000277. 2000WO-US000376. 2000WO-US003565.

2000WO-US008439. 2000WO-US013705. 2000WO-US014042. 2000WO-US014941. 2000WO-US015264. 2000WO-US020710. 2000WO-US022031.

2000WO-US005746. 2000WO-US005841. 2000WO-US006319.

2000WO-US005601 2000WO-US004914 2000WO-US004414 2000WO-US004342 2000WO-US004341

2000WO-US007377 2000WO-US007532

2000WO-US006884

J.

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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The C invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis CC polypeptide, a method for stimulating the release of tumour necrosis CC polypeptide, a method for stimulating the release of tumour necrosis CC polymucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in CC medicament for treating a condition responsive to the polymess and in CC medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of or gene expression in perioyte cells, for stimulating the proliferation of inner ear utricular supporting and for treating cells, for stimulating the uptake of CC cells, for inducing endothelial cell tube formation and for treating cells or T-lymphocyte cells, for stimulating the uptake of CC cells, for inducing endothelial cell tube formation and for treating cells or T-lymphocyte cells, for stimulating the uptake of CC cells, for producing endothelial cell tube formation and for treating cells or T-lymphocyte cells, for stimulating the uptake of CC cells, for stimulating endothelial cell tube formation and for treating cells or T-lymphocyte cells and content treating cells or T-lymphocyte cells and content treating cells or T-lymphocyte cells and content treating cells or treating cells or T-lymphocyte cells and content cells cells or treating cells or treating cells or treating cells or treating cells and cells cells or treating cells and cells cells cells cells cells or treating cells cells cells cells cells cells cell
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; secreted and transmembrane protein; PRO;
Tumour necrosis factor alpha release;
Pure protein; protein;
glucose uptake modulator; FFA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumo
lung tumoue; colon tumour; breast tumour; prostate tumour; rectal
cervical tumour; liver tumour; chromosome mapping; gene mapping;
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98WO-US019094
98WO-US019017
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98WO-US019330
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2001WO-US0201166.
2001WO-US021066.
2001WO-US021735.
2001US-00908872.
2001US-00924419.
2001US-00927796.
2001US-00931836.
2001US-00931836.
                                                                                                                                                                       ; 2001WO-US017092.
; 2001US-00872035.
; 2001WO-US017800.
; 2001US-00874503.
; 2001US-00882636.
                                                                                                                                                             2001US-00886342
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(GETH) GENENTECH INC.

Baker KP, Beresini M, Gerritsen ME, Goddard Smith V, Stewart TA, 1 A, Godowa Tumas D, Deforge L, Desnoyers L, Filva: A, Godowski PJ, Gurney AL, Sh Tumas D, Watanabe CK, Wood WI, Filvaroff E, L, Sherwood S; Zhang Z; Gao Σ

WPI; 2003-786919/74. N-PSDB; ADB39148.

New secreted and transmembrane PRO polypeptide useful for detecting the presence of tumor in a mammal, or modulating the uptake of glucose or free fatty acid by skeletal muscle cells or adipocyte cells.

Claim 12; Fig 24; 659pp; English.

The invention describes 305 nucleic acids encoding PRO (secreted and cransmembrane) polypeptides (I). (I) is useful for stimulating the Cransmembrane) polypeptides (I). (I) is useful for stimulating the groliferation on differentiation of the uptake of Cg glucose or FRP by skeletal muscle cells or adipocyte cells, for Stimulating the proliferation of of or entering the proliferation of or gene expression in perioyte (cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of Tlymphocyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of relymphocyte cells, for stimulating the proliferation of relymphocyte cells, for stimulating the proliferation of endothelial cells, for stimulating the binding of the researce of tumour in a mammal. The tumour is lung, colon, breast, cells, for stimulating genomic and cDNA nucleotide sequences or are useful for isolating genomic and cDNA nucleotide sequences or care useful for isolating other proteins or molecules involved in binding interaction. A polymucleotide (II) encoding (I) is useful in the propertion of pRO polypeptide, for generating transgenic animals or chromosome identification, as chromosome marker, and for generating correcaning of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating correcaning its expression in specific cells, tissues or matural corrections. (I) and (II) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO collections. polypeptide.

Sequence 285 AA;

Query Match Best Local Sim Matches 285; Similarity Conservative 100.0%; 0; Score 1451; DB 7; Pred. No. 1.3e-144; Mismatches 0; Indels Length 285; 0; Gaps 60

0

Ş 밁 Ş MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC 60

61 LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP

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The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the release of TMF-alpha from human blood, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation or or gene expression in pericyte cells, for stimulating the release of proteoglycans from cartilage, for stimulating the proliferation of interestion at tricular supporting cells, for stimulating the proliferation of Tlymphocyte cells, for stimulating the binding of the release of a cytokine from PBMC cells, for inhibiting the binding of A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
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01-DEC-2000;
19-DEC-2001;
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Tunour necrosis factor alpha release; TWF-alpha release;
glucose uptake modulator; FFA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumour;
lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                            New isolated nucleic acid encoding a PRO polypeptide, e. PRO4978, useful in molecular biology, chromosome and ger generating antisense RNA and DNA, and in gene therapy.
                                                                                                                                                                                                                                                                                                                                                                   Gerritsen ME, Goddar Smith V, Stewart TA,
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DB; ADB46771.
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2000WO-US032678.
2001US-00028072.
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A, Godowski PJ, Gurney AL, She
A, Godowski PJ, Gurney AL, She
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Best Local S
Matches 285
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Pred. No. 1.3e-144;
Mismatches 0;
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Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; liver; microvascular endothelial cell; glucose; FPA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; cendothelial cell tube formation, bone disorder; cartilage disord sports injury; proteglycan; articular cartilage defect; osteoar sports injury; hencore in the formation associated disorder thalassaem
US2003082697-A1
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osteoarthritis; disorder;

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                                                                                                                                                                                                                                                                                                                        CC useful in the development and screening of therapeutically useful according to the properties or antibodies are used in preparing a commedicament for treating a condition responsive to the polypeptides or cc antibodies, such as tumours, for stimulating and inhibiting proliferation cof human microvascular endothelial cells, for modularing the uptake of cylindes or FRA by skeletal muscle cells or adipocyte cells, for stimulating the uptake of cylindes or for gene expression in pericyte cells, for stimulating cylinderation of inner ear utricular supporting cells for stimulating cylinderation of inner ear utricular supporting cells for stimulating cylinderation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating cylinder cartilage are useful for treating such as sports injuries and carticular cartilage defects, osteoarthritis such as sports injuries and carticular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-competite form enhanced local immune system cell infiltration. Which can be propertied as a human PRO polypeptide of the invention. Note: The cylinder cartilage and sports is also available in electronic format from construction of this patent is also available in electronic format from construction.
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Best Local :
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01-DEC-2000;
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01-SEP-1999;
18-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     colon, breast, prostate, rectal, kidney, cervical and liver tumours, polymucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polymucleotides may a be used in preparing PRO polypeptides by recombinant techniques and generating either transgenic animals or knock-out animals which are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to isolated human PRO polypeptides (secreted an transmembrane polypeptides) and the polypucleotides encoding them. The invention also relates to an antibody which specifically binds to a polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating t
                                                                                                                                                                                                                                                                                             Sequence
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GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                              LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
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Tumas D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Deforge L, Desnoyers L, Filvaroff E, G
A, Godowski PJ, Gurney AL, Sherwood S;
Pumas D, Watanabe CK, Wood WI, Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  English
                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                Score 1451; DB 7;
Pred. No. 1.3e-144;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRO polypeptides, useful in the diagnosis
                                                                                                                                                                                                                   Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and liver tumours).
                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                    Length
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                                                                                                                                                                                                               Gaps
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26-JUL-1999; 99US-014568BP.
01-SEP-1999; 99WO-US020111.
18-OCT-1999; 99US-00403297.
05-JAN-2000; 2000WO-US000219.
18-FEB-2000; 2000WO-US004342.
01-DEC-2001; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the release of TNF-alpha from human blood, for modulating the uptake of glucose or FRA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the release of proteoglycans from cartilage, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of Flymphocyte cells, for stimulating the proliferation of procession in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of flymphocyte cells, for stimulating of A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting
                                                                                                                                                                                                                                                                                                                                                 Gerritsen
Smith V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               glucose uptake modulator; FFA uptake modulator; cell proliferation stimulator; cell differentiation stimulator; cell differentiation stimulator; tumour; cell differentiation inihibitor; cytokine release stimulator; tumour; lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour; cervical tumour; liver tumour; chromosome mapping; gene mapping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-APR-2002;
                                                                                                                                                                                                                                                                   PRO nucleic acid, useful for preparing
                                                                                                                                                                                                                                                                                                                                                                                      Baker KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2003082696-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                   (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tumour necrosis factor alpha release;
                                                                                                                                                                                                                                                                                                      2003-755109/71
DB; ADB76983.
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                                                                                                                                                                                                                                                     for tissue
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                                                                                                                                                                                                                    Fig
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                                                                                                                                                                                                                                                                                                                                                                   Beresini M,
ME, Goddard
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    chromosome
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                                                                                                                                                                                                                  637pp;
                                                                                                                                                                                                                                                                                                                                                   A, Godov
Tumas D,
                                                                                                                                                                                                                                                                                                                                                   Deforge L, Desnoyers L,
A, Godowski PJ, Gurney i
Tumas D, Watanabe CK, Wo
                                                                                                                                                                                                                    English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  identification;
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                                                                                                                                                                                                                                                                     a composition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    chromosome
                                                                                                                                                                                                                                                                                                                                                     y AL, Sherwood S;
Wood WI, Zhang Z
                                                                                                                                                                                                                                                                                                                                                                                    Filvaroff E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      marker
                                                                                                                                                                                                                                                                     for treating e.g.,
                                                                                                                                                                                                                                                                                                                                                     Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                    Gao W;
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the presence of tumour in a mammal. The tumour is lung, colon, breast, corpostate, rectal, cervical or liver tumour. The oligonucleotide probes are useful for isolating genomic and cDNA nucleotide sequences or artisense probes. (I) is also useful as therapeutic agent. PRO is useful in theraction. A polynucleotide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the creparation of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and contractions of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating concesting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural concess. (I) and (II) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local :
                                                                                                                                                                                                                  Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; pericyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteglycan; articular cartilage defect; osteoarthritis; presented atthritis; haemoglobin-associated disorder thalassaemia; injury; proteglycan; articular cartilage defect; osteoarthritis; presented atthritis; haemoglobin-associated disorder thalassaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 285
                                                                                                  US2003077717-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-DEC-2003
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                                                                                                                                                                                                  system
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                     cell
                                                                                                                                                                                                       infiltration.
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В Ś 멍 8

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24-APR-2002; 2002US-00131818

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1 MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC

Matches Query Match Best Local

285;

Similarity

100.0%;

Score 1451; DB 7; Pred. No. 1.3e-144; ; Mismatches 0;

Indels

<u>,</u>

Gaps

0

В S 밁

61 61

LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC

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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypucleotides encoding them. The cinvention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis captoniferation or differentiation of chondrocyte cells and a method for colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polypucleotides are useful in molecular biology, including uses as complying property of the polypucleotides are useful in molecular biology, including uses as complying enther transgenic animals or knock-out animals which are complying either transgenic animals or knock-out animals which are complying enther transgenic animals or knock-out animals which are complying to the polypuclates or antibodies, such as tumours, for stimulating and indifferentiation of or gene expression in pericyte cells, for stimulating problems, such as tumours, for stimulating and inhibiting proliferation of or gene expression in pericyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating cells or adipocyte cells, for stimulating conditions are supporting the uptake of cells, for inducing endothelial cell tube formation and for treating cells or T-lymphocyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating cells or cartilage defects, estecarthritis and for treating cells or T-lymphocyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for stimulating cells or cartilage defects, estecarthritis and rheumatoid arthritis. PRO polypeptides which stimulate the release of proteoglycans arthritis. PRO polypeptides which stimulate the release of proteoglycans cartilage defects, estecarthritis and rheumatoid arthritis. PRO polypeptides of the invention. This sequence data for this patent is also available in electronic format from useful for metal and conditions which metals a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-OCT-1998;
01-SEP-1999;
18-OCT-1999;
30-NOV-1999;
18-FEB-2000;
01-DEC-2000;
19-DEC-2001;
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Smith V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated, secreted and transmembrane PRO polypeptides and nucleic acids, useful for the diagnosis, prevention and/or treatment of tumor such as lung, colon, breast, prostate, rectal, cervical and/or liver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; ADB34140.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 12; Fig
Sequence 285 AA;
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VE, Goddard
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; 2000WO-US032678.
; 2001US-00028072.
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99WO-US020111.
99US-00403297.
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A, Godowski PJ, Gurney J
Tumas D, Watanabe CK, W
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Wood WI,
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L, Sherwood S;
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01-DEC-1999;
01-DEC-2000; 20
19-DEC-2001; 20
The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating
                                                                                                                                                                                                                             New isolated, secreted and transmembrane PRO polypeptides and nucleic acids, useful for the diagnosis, prevention and/or treatment of tumors, such as lung, colon, breast, prostate, rectal, cervical and/or liver
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Smith V, Stewart
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                                                                                                                                                                                    Claim 12;
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                                                                                                                                                                                                                                                                                                                                                                                 Baker KP,
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DB; ADB35244.
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ME, Goddard
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2001US-00028072.
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99WO-US028634.
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Tumas
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
                                                                                                                                                                                  English.
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                                 tumour necrosis factor-alpha; TNY-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cer: liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthr: rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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Pred. No. 1.3e-144;
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US2003077716-A1

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CX The invention relates to isolated human PRO polypeptides (secreted and cransmembrane polypeptides) and the polynucleotides encoding them. The crown properties are method for stimulating the release of tumour necrosis of factor-alpha (TNP-alpha) from human blood, a method for stimulating the release of tumour necrosis of factor-alpha (TNP-alpha) from human blood, a method for stimulating the prosence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and prostate man and blood, and method for stimulating uses as the polypeptides are below, including uses as the colon, breast, properties and in preparing a condition properties and in gene mapping, in generating a creatil breast properties or treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of the proliferation of or gene expression in pericyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating cells or T-lymphocyte cells, for stimulating and for treating colls, for stimulating and for treating the problems, proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for stimulating and for treating cells or T-lymphocyte cells, for stimulating the treating colon problems, proliferation of or gene expression in pericyte cells, for stimulating the problems, proliferation of the problems, proliferation certified and problems, proliferation certified and problems, proliferatio
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01-SEP-1999; 99WG-US020111.
16-OCT-1999; 99US-00403297.
18-FEB-2000; 2000WG-US004342.
110-NOV-2000; 2000WG-US0032678.
01-DEC-2000; 2000WG-US0032678.
119-DEC-2001; 2001US-00028072.
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Gerritsen ME, Goddard
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                                                                           hes 285;
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DB; ADB33588.
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Tumas D,
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A, Godowski PJ, Gurney AL, Sh
Tumas D, Watanabe CK, Wood WI,
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                                                                         Score 1451; DB 7;
Pred. No. 1.3e-144;
D; Mismatches 0;
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L, Sherwood S;
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(GETH) GENENTECH INC

Baker KP, Beresini M, Gerritsen ME, Goddard Smith V, Stewart TA, I A, Godow Deforge L, Desnoyers L, Filvaroff E, G A, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z; Gao Ξ

WPI; 2003-755073/71. N-PSDB; ADB34692.

acids, useful such as lung, New isolated, secreted and transmembrane PRO polypeptides and nucleic for the diagnosis, prevention and/or treatment of tumors, colon, breast, prostate, rectal, cervical and/or liver

12; Fig 24; 638pp; English

Colon, breast, prostate, rectal, kidney, cervical and liver tumours). The Colon, breast, prostate, rectal, kidney, cervical and liver tumours). The Colon, breast, prostate, rectal, kidney, cervical and liver tumours). The Colon, breast, prostate, rectal, kidney, cervical and liver tumours). The Colon, breast probes, in chromosome and gene mapping, in generating colon probes, in chromosome and gene mapping, in generating colon probes, in chromosome and gene mapping, in generating colon probes, in chromosome and gene mapping, in generating colon probes, in chromosome and gene mapping, in generating colon probes by recombinant techniques and in Generating at the generating and animals which are colored to the polypeptides by recombinant techniques and in Generating and in the RNO polypeptides or antibodies are used in preparing a colon for treating a condition responsive to the polypeptides or colon for the problem and colon propositions, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of Colon proliferation of or gene expression in pericyte cells, for stimulating the uptake of Colon proliferation of or gene expression in pericyte cells, for stimulating Colon proliferation of or gene expression in pericyte cells, for stimulating Colon proliferation of inner ear urricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating Colon proliferation and for treating colon arthritis. PRO polypeptides which stimulate the release of proteoglycans of formation are also useful for treating sports-related joint problems, colon proliferation and conditions which colon and colon and conditions which colon and colon and colon arthritis. PRO colon colon and colon and colon arthritis. PRO colon colon colon and colon arthritis. PRO colon detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for

Sequence 285 AA;

Ş 밁 Ś 뮍 Ś Query Match Best Local Matches 121 121 285; 61 61 Similarity GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLILLALLSCC GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC Conservative 100 .0%; Score 1451; DB 7; .0%; Pred. No. 1.3e-144; 0; Mismatches 0; Indels Length 0 Gaps 180 180 120 120 60 60

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KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL

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RESULT 118
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01-DEC-2000;
19-DEC-2001;
                                                                                                        The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and on generating encombinant techniques and in generating etcher transgenic animals or knock-out animals which are useful in the development animals or knock-out animals which are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cerv liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; carrilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthricheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for
                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated, secreted and transmembrane PRO polypeptides and nucleic acids, useful for the diagnosis, prevention and/or treatment of tumors, such as lung, colon, breast, prostate, rectal, cervical and/or liver
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Smith V, Stewart TA,
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Œ, Goddard
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A, Godowski PJ, Gurney AL, She
Lumas D, Watanabe CK, Wood WI,
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Sherwood S;
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RESULT 119
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Matches 285;
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                                                                                                                                                                                                                                            Human; secreted and transmembrane protein; PRO; Tumour necrosis factor alpha release; TNF-alpha release; glucose uptake modulator; FPA uptake modulator; cell proliferation stimulator; cell differentiation stimulator; cell differentiation inhibitor; cytokine release stimulator; tumo lung tumoue; colon tumour; breast tumour; prostate tumour; rectal cervical tumour; liver tumour; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         285 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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Pred. No. 1.3e-144;
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03-MAR-2000; 2000US-0187202P. 01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072.

01-MAY-2003

22-APR-2002;

2002US-00127842.

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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 285 AA;
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Smith V, Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polypeptide:
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                       PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL 285
                                                                                                     KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                                                                                           GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
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                                                                          KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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100.0%; Pred. No. 1.3e-144;
tive 0; Mismatches 0;
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
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autoimmune disease; allergy; organ rejection; immune response; psoriasis; inflammation; systemic lupus erythematosis; lupus neuritis; asthma; BlyS; chronic obstructive pulmonary disease; bronchitis; emphysema; cirrhosis; multiple sclerosis; uveitis; Alzheimer's disease; atherosclerosis; zTNF4; traumatic spinal cord injury; coronary restemosis; diabetic nephropathy; ischaemic congestive heart failure; hepatitis G; glomerulonephritis; osteoarthritis; rheumatoid arthritis; atopic dermatitis; Crohn's disease; systemic sclerosis; radiation-induced fibrosis; ulcerative colitis; multiple myeloma; cachexia; Tumour Necrosis; succrative colitis; TALL-1; THAUK; Immunosuppressive; Antiallergic; Antifilammatory; TALL-1; THAUK; Antiasthmatic; Neuroprotective; Ophthalmological; Nootropic; Tranquiliser; Vulnerary; Cerebroprotective; Virucide; Antiarthritic; Antifilammatic; Antidiabetic; Nephrotropic; Osteopathic; Antiarthritic; Antirheumatic; Antidiabetic; Nephrotropic; Osteopathic; Antiarthritic; Antirheumatic; Antigeoriatic; Human B-cell activating factor, Antiemetic; 18-DEC-2003 ABR56191 standard; protein; 285 Cytostatic; Antiulcer; Immunomodulator protein co-ordinate data; B-cell (first entry) BAFF activating factor;

stroke;

Homo sapiens

Location/Qualifiers 136. .285 /label= Extracellular_domain

WO2003022877-A1.

06-SEP-2002; 2002WO-US028579

06-SEP-2001; 2001US-0317524P

(BIOJ) BIOGEN

WPI; 2003-402877/38.

Crystallizable composition used for designing chemical en compounds comprises B cell activating factor polypeptide entities

Disclosure; Fig 9A; 137pp; English.

CC Crystal composition relates to a crystallisable composition or a CC crystal composing B-cell activating factor (BAFF) or its trimer. The present sequence is human BAFF. The composition can be used in a CC pharmaceutical composition for treating conditions associated with abrormal BAFF induced activation in humans e.g. autoimmune diseases. CC abnormal BAFF induced activation in humans e.g. autoimmune diseases. CC allergy, inhibitor response to a therapeutic agent, rejection of a donor crysthematosis, lupus neuritis, asthma, chronic obstructive pulmonary CC disease, bronchitis, emphysema, multiple sclerosis, uveitis, Alzheimer's CC disease, bronchitis, emphysema, multiple sclerosis, uveitis, Alzheimer's CC disease, bronchitis, spinal cord injury, stroke, atherosclerosis, coronary CC restenosis, ischaemic congestive heart failure, cirrhosis, hepatitis C, CC diabetic nephropathy, glomerulonephritis, osteoarthritis, rheumatoid CC arthritis, psoriasis, atopic dermatitis, systemic sclerosis, radiation-induced fibrosis, Crohn's disease, ulcerative colitis, multiple myeloma CC and cachexia. BAFF belongs to the Tumour Necrosis Factor (TNF) family and CC is a type II membrane protein. BAFF is expressed in different cell types, including T-cells and dendritic cells. The full-length BAFF is a trimeric collectular stalk, a short transmembrane segment and a small CC cytoplasmic domain. BAFF is also known as BlyS, TALL-1, THANK and ZTNF4

RESULT 120 ABR56191

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RESULT 121
ADC35212
ID ADC352
XX ADC352
XX ADC352
XX Homan;
XX human;
XX human;
XX excess
XX excess
XX US200;
XX US200;
XX Homo £
XX US200;
XX Homo £
XX IS-AU
XX IS-AU
PF 15-AU
PF 15-AU
PF 15-AU
PF 16-AU
PF 16-AU
PF 30-OC
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XX HOME
PT WH G,
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PA (NIJU)
PR 30-OC
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Matches 285
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The invention relates to an isolated nucleic acid molecule encoding a tumour necrosis factor family ligand. A composition comprising the isolated antibody or its fragment is used for treating an individual in need of decreased level of endokine alpha activity. The endokine alpha polypeptide present in a heterotrimeric complex is used for treating an individual having a disorder associated with excessive bone resorption, e.g. osteoporosis, Paget's disease or arterial calcification.
                                                                                                                                                                                                                                                        New Endokine alpha
disease associated
                                                                                                                                                                                                                                                                                                                              N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                           (YUGG/)
(NIJJ/)
(ROSE/)
(NARD/)
                                                                                                                                                                                            Disclosure;
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30-OCT-2001;
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DB; ADC35211.
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RESULT 12
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PR 19-1PR 01-1PR 01-1-19-AUG-1998; 02-JUN-1999; 25-AUG-1999; 30-MAR-2000; 01-DEC-2000; 19-DEC-2001; Human; secreted and transmembrane protein; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothalial cell; glucose uptake modulator; FFA uptake modulator; cell proliferation; cell differentiation; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; Tlymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; heemactoid arthritis; haemoglobin-associated disorder; thalasseemia; immune system cell infiltration; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker. Homo 24-APR-2002; Novel human (GETH) GENENTECH secreted 2000WO-US008439. 2000WO-US032678. 2001US-00028072. 2002US-00131822 (first entry) 98US-0097141P. 99WO-US012252. 99US-00380137. and transmembrane protein PR0738 osteoarthritis;

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CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC plynucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating CC antisense RNA and bNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in CC generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful cantibodies. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of CC glucose or FRA (free fatty acid) by skeletal muscle cells, for stimulating differentiation of adipocyte cells, for stimulating proliferation of or gene expression in pericyte cells, for collisulating the proliferation of or gene expression in pericyte cells, for treating various bone and/or cartilage adisorders such as sports injuries and arthritis .PRO polypeptides which stimulate the release of corbeoglyvans from cartilage are useful for treating various thalassaemias cand conditions which may benefit from enhanced local immune system cell cand conditions which may benefit from enhanced local immune system cell cinfiltration. This sequence represents a human PRO polypeptide of the cinvention. Note: The sequence data for this patent is also available in cellectronic format from USPTO at segdata.uspho.gov/sequence.html.
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Matches 285
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
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RESULT 123
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Human; secreted and transmembrane protein; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose uptake modulator; FFA uptake modulator; cell proliferation; cell differentiation; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia; immune system cell infiltration; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker.
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10-NOV-2000;
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01-SEP-1999;
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2000WO-US030873.
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2000US-00028072.
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99WO-US020111.
99US-00403297.
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as PRO, cardiac New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or 2003-801172/75. DB; ADC71611.

Gerritsen

Stewart

A, Go Tumas

Deforge L, Desnoyers L, Filvaroff E, A, Godowski PJ, Gurney AL, Sherwood Tumas D, Watanabe CK, Wood WI, Zhang

1 S;

Gao

Beresini M, ME, Goddard

Claim 12; Fig 24; 637pp; English

The invention relates to isolated human PRO polypeptides (secreted and creamsmembrane polypeptides) and the polypucleotides encoding them. The crimination also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis creator-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for content to presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as complymented to DNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are cuseful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or The

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Best Local Similarity
                                                                                                                                                                                                            Human; secreted and transmembrane protein; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha, TNF-alpha; chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose uptake modulator; FFA uptake modulator; cell proliferation; cell differentiation; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; hammane system cell infiltration; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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                                                                                                                                               Homo sapiens
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Pred. No. 1.3e-144;
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S 밁 Ş

Matches

285;

Conservative

Similarity

100.0%;

Score 1451; DB 7; Pred. No. 1.3e-144; ; Mismatches 0;

Length

Indels

0;

Gaps

.0%; 0

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61 61

121

GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE

LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP

LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP

120 180

120 60 60

MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC

MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC

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Colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polypurcleotides are useful in molecular biology, including uses as complying the property of the polypurcleotides may also complying the property of the polypurcleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are cuseful in the development and screening of therapeutically useful creating a condition responsive to the polypeptides or medicament for treating a condition responsive to the polypeptides or committee the polypeptides or antibodies are used in preparing a commedicament for treating anothelial cells, for modulating the uptake of glucose or FPA (free fatty acid) by skeletal muscle cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating proliferation of or gene expression in pericyte cells, for complete cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arrhiritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint cartilage, are also useful for treating sports-related joint mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. Note: The sequence data for this patent is also available in electronic format from USPTO at sequence separate.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-DEC-1999;
01-DEC-2000;
19-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TWF-alpha) from human blood, a method for stimulating the proliferation or differentiation of condrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon is the presence of the colon is the presence of the colon is the presence of the colon in the property of the colon is the presence of the colon in the
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Smith V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-801170/75
N-PSDB; ADC59590.
Sequence
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ME, Goddard
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2000WO-US032678.
2001US-00028072.
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Tumas
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A, Godowski DJ, Gurney AL,
Wastanabe CK, Wood
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L, Sherwood
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14-SEP-1998; 98WO-US019094.
14-SEP-1998; 98WO-US019094.
14-SEP-1998; 98WO-US019177.
16-SEP-1998; 98WO-US019177.
17-SEP-1998; 98WO-US019437.
07-OCT-1998; 98WO-US022991.
29-OCT-1998; 98WO-US022992.
20-NOV-1998; 98WO-US025108.
01-DEC-1998; 98WO-US025108.
01-MAR-1999; 99WO-US005190.
10-MAR-1999; 99WO-US005190.
11-MAY-1999; 99WO-US005190.
11-MAY-1999; 99WO-US005190.
11-SEP-1999; 99WO-US012252.
01-SEP-1999; 99WO-US020111.
08-SEP-1999; 99WO-US0210944.
15-SEP-1999; 99WO-US0210944.
15-SEP-1999; 99WO-US02109944.
15-SEP-1999; 99WO-US02109944.
15-SEP-1999; 99WO-US021091.
30-NOV-1999; 99WO-US021091.
30-NOV-1999; 99WO-US0218014.
30-NOV-1999; 99WO-US028310.
01-DEC-1999; 99WO-US02864.09.
01-DEC-1999; 99WO-US028564.09.
02-DEC-1999; 99WO-US0308551.09WO-US0308565.
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12-JUN-1998;
14-JUL-1998;
28-AUG-1998;
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98WO-US019093

98WO-US019094

98WO-US019177

98WO-US019130

98WO-US019437

98WO-US021141

98WO-US022191
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98WO-US014552
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                                                                                                                              Baker KP,
Gerritsen
Smith V,
      New PRO nucleic acid, useful diagnosing or treating tumor.
                                                                   WPI; 2003-801150/75.
N-PSDB; ADC52597.
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Stewart TA,
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2001US-00866028.
2001US-00866034.
2001US-0086034.
2001US-0086034.
2001US-00872035.
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99WO-US030720.
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99WO-US031274.
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Tumas D,
                                                                                                                                Deforge L, Desnoyers L, Filvaroff E, G
A, Godwoski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
                              for
                              manufacturing
                              a medicament
                                for
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                                                                                                                                                                                                                                                                                                                                                           RESULT 126
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                                                                                                                       human; PRO; membrane bound protein; membrane bound receptor; cell proliferation; cell migration; cell differentiation; mitogenic factor; survival factor; cytotoxic factor; differentiation factor; neuropeptide; hormone; cell receptor
                                                                                                        differentiation receptor-ligand
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                                                                      sapiens
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                                                                                                          interaction; cytostatic; chondrocyte; tumour.
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Pred. No. 1.3e-144;
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30-MAY-2000;
01-DEC-2000;
19-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       is often transmitted by secreted polypeptides (for example mitogenic factors, survival factors, cytotoxic factors, differentiation factors, neuropeptides and hormones) which are received and interpreted by diverse cell receptors or membrane bound proteins. These membrane bound proteins and receptors may be of use as pharmaceutical and diagnostic agents, such as in the blocking of receptor-ligand interactions. The current invention provides the amino acid sequences of novel human membrane bound receptors and proteins, along with the cDNA sequences encoding them. The novel proteins of the invention may have cytostatic activities through the stimulation of chondrocytes. The nucleic acids of the invention may be useful for the manufacture of a medicament for diagnosing or treating a tumour in a mammal. In addition, they may be useful for measuring or detecting the expression of a tumour associated gene. The present sequence is the amino acid sequence of a human PRO protein of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and transmembrane proteins. Extracellular proteins play important roles in the formation, differentiation and maintenance of multicellular organisms. The fate of many individual cells (for example proliferation, migration or differentiation) is typically governed by information received from other cells and the immediate environment. The information
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New PRO nucleic acid, useful for diagnosing or treating tumor.
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 285
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                   PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                                                KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                     KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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E, Goddard
                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 1451; DB 7; ilarity 100.0%; Pred. No. 1.3e-144; Conservative 0; Mismatches 0:
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11-MAR-1999
11-SEP-1999
11-DEC-1999
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16-SEP-1998;
17-SEP-1998;
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98WO-US024855.
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21-AUG-2000
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20-MAR-2000;
21-MAR-2000;
30-MAR-2000;
17-MAY-2000;
22-MAY-2000;
The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO
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and
                                                                                                                                      WPI; 2003-801152/75.
N-PSDB; ADC60142.
                                                                                                                                                                                 Baker KP, Beresini M,
Gerritsen ME, Goddard
Smith V, Stewart TA,
                                                             Claim
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                                                                                          PRO
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                                                                                         nucleic acid, manufacturing
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                                                          638pp;
                                                                                       useful for preparing a recombinant PRO polypeptide a medicament for diagnosing or treating tumor.
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Tumas D,
                                                                                                                                                                                 Deforge L, Desnoyers L, Pilvaroff E, G
A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
                                                            English.
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CC useful in the development and screening of therapeutically useful CC reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or cC medicament for treating a condition responsive to the polypeptides or cC antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of CC glucose or FPA (free fatty acid) by skeletal muscle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating proliferation of inner ear turicular supporting cells or CC stimulating the proliferation of inner ear turicular supporting cells or CC Tlymphocyte cells, for inducing endothelial cell tube formation and for CC treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of CC proteoglycans from cartilage are useful for treating sports-related joint CC proteoglycans from cartilage defects, osteoarthritis and rheumatoid CC arthritis. PRO polypeptides which stimulate the release of CC proteoglycans from cartilage are useful for treating various thalassaemias and conditions which may benefit from enhanced local immune system cell convention. Note: The sequence data for this patent is also available in celectronic format from USPTO at sequence set as human PRO polypeptide of the
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Query Match Best Local Score 1451; DB 7; Pred. No. 1.3e-144;

Similarity

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ADC50618 standard; protein; 285

18-DEC-2003 (first entry)

Novel human secreted and transmembrane protein PR0738

Human; secreted and transmembrane protein; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose uptake modulator; FFA uptake modulator; and annual cell;

> cell differentiation; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cel endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthri rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia; immune system cell infiltration; chromosome mapping; gene mapping; therapy; chromosome identification; chromosome marker. osteoarthritis;

Homo sapiens

US2003087361-A1

09-SEP-1998; 98US-0099536P.
01-SEP-1999; 99WC-US020111.
18-OCT-1999; 99US-00403297.
18-FEB-2000; 2000WC-US004342.
01-DEC-2000; 2000WC-US032678.
19-DEC-2001; 2001US-00028072. 22-APR-2002; 2002US-00127841

(GETH) GENENTECH INC

Smith Gerritsen < 쯗 , Beresini M, n ME, Goddard Stewart TA, Tumas Deforge L, Desnoyers L, Filvaroff E, G A, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z; Gao Σ

2003-801146/75

PRO nucleic acid, for manufacturing useful for preparing a recombinant PRO parent for diagnosing or treating PRO polypeptide ating tumor.

Claim 12; Fig 24; 637pp; English

The invention relates to isolated human PRO polypeptides (secreted and contransmembrane polypeptides) and the polypublides encoding them. The contransmembrane polypeptides) and the polypublides encoding them. The contransmembrane polypeptides an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis of factor-alpha (fur-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The proposition or differentiation of chondrocyte cells and a method for colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as colympicates and another tumours, the polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in conservating either transgenic animals or knock-out animals which are cuseful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating, a condition responsive to the polypeptides or conditions to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of cells, for stimulating differentiation of adipocyte cells, for stimulating proliferation of or gene expression in pericyte cells, for relating various bone and/or cartilage are useful for treating sports injuries or certain problems, articular supporting cells or proteoglycans from cartilage are useful for treating sports related joint problems, articular cartilage are useful for treating sports related joint and conditions which may benefit from enhanced local immune system cell cell tube format to such as sports thalassaemias and conditions. Note: The sequence data for this patent is also available in treation of stepators thalassaemias. from

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RESULT 129
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                                              New PRO nucleic acid, useful diagnosing or treating tumor.
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01-DEC-2000; 2000WO-US032678
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                       Claim
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ME, Goddard
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a, Godowski PJ, Gurney AL, Sherwood
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cc transmembrane polypeptides) and the polynucleotides encoding them. The cinvention also relates to an antibody which specifically binds to a PRO cc polypeptide, a method for stimulating the release of tumour necrosis cc factor-alpha (TMP-alpha) from human blood, a method for stimulating the propertion or differentiation of chondrocyte cells and a method for cd detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polypucleotides are useful in molecular biology, including uses as complying the state of the property of the polypucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in creating either transgenic animals or knock-out animals which are complying in the development and screening of therapeutically useful colon are proposed. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of of human microvascular endothelial cells, for modulating the uptake of colons or property arises and stimulating and the proliferation of or gene expression in pericyte cells, for stimulating cells, for inducing endothelial cells or adipocyte cells, for stimulating cells or right for antibodies are used in ordinations of inner ear utricular supporting cells or right probables. For stimulating cells or right probables, for stimulating sports related joint problems, constitues and propertides are also useful for treating sports related joint problems, constitued are also useful for treating various mammalian hemoglobinasculared disorders such as various thalassaemias and conditions which cells sequence atta for this patent is also available in electronic format from upperiode atta for this patent is also available in electronic format from useful at segment and sequence.html.
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                                                                                                                                                                      GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                                                                                                                             LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                                                                                            GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPT1QKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                                                                                                   LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                                                                                                                                                                                                        MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                        KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1451;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                      ; DB 7;
1.3e-144;
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ADC54243
ID ADC5
XX
AC ADC5
AC ADC5
DT 18-E
XX
DE Nove
XX
KW cell
KW cell
human; PRO; membrane bound protein; membrane bound recept cell proliferation; cell migration; cell differentiation; mitogenic factor; survival factor; cytotoxic factor;
                                                       Novel human
                                                                                                                                       ADC54243
                                                                                  18-DEC-2003
                                                                                                                                     standard; protein;
                                                       secreted
                                                                                  (first
                                                                                 entry)
                                                       and transmembrane protein
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receptor;

241

PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL

The invention relates to

isolated

human

PRO polypeptides (secreted

and

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and transmembrane proteins. Extracellular proteins play important roles

Chin the formation, differentiation and maintenance of multicellular

corganisms. The fate of many individual cells (for example proliferation,

migration or differentiation) is typically governed by information

Creceived from other cells and the immediate environment. The information

creatived from other cells and the immediate environment. The information

creatived from other cells and the immediate environment. The information

creatived from other cells and the immediate environment. The information

creatived from other cells and the immediate environment. The information

creatived from other cells and the proteins factors, differentiation factors,

creatived and interpreted by diverse

creatived and interpreted by diverse

creative from the membrane bound proteins. These membrane bound proteins

as in the blocking of receptor-ligand interactions. The current invention

creating and proteins, along with the cDNA sequences encoding them. The novel

proteins of the invention may have cyrostatic activities through the

creative for the manufacture of a medicament for diagnosing or treating a

transmitted for the manufacture of a medicament for diagnosing or treating a
                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-SEP-1998;
01-SEP-1999;
18-OCT-1999;
18-FEB-2000;
01-DEC-2000;
19-DEC-2001;
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Smith V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tumour in a mammal. In addition, they may be useful for measuring detecting the expression of a tumour associated gene. The present sequence is the amino acid sequence of a human PRO protein of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-APR-2002;
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                                                                                      GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                                               LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
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                                                                                                                                                                                                                                                MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLILALLSCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO
KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                 GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                    LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
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ME, Goddard
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99WO-US020111.

99WO-00403297.

2000WO-US0043427.

2000WO-US032678.

2001US-00028072.
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llarity 100.0%;
Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               factor; neuropeptide; hormone; cell receptor;
interaction; cytostatic; chondrocyte; tumour.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24; 637pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          useful for preparing a recombinant PRO polypeptide a medicament for diagnosing or treating tumor.
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, Godowski PJ, Gurney J
                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                           Score 1451; DB 7;
Pred. No. 1.3e-144;
0; Mismatches 0;
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L, Sherwood
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                             migration or differentiation) is typically governed by information or creceived from other cells and the immediate environment. The information of is often transmitted by secreted polypeptides (for example mitogenic factors, survival factors, cytotoxic factors, differentiation factors, characteristics and interpreted by diverse cell receptors or membrane bound proteins. These membrane bound proteins and receptors may be of use as pharmaceutical and diagnostic agents, such as in the blocking of receptor-ligand interactions. The current invention provides the amino acid sequences of novel human membrane bound receptors and proteins, along with the CDNA sequences encoding them. The novel proteins of the invention may have cytostatic activities through the stimulation of chondrocytes. The nucleic acids of the invention may be useful for the manufacture of a medicament for diagnosing or treating a tumour in a mammal. In addition, they may be useful for measuring or detecting the expression of a tumour associated gene. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gerritsen
Smith V,
                                                                                                                                                                                                                                                                                           This invention relates to novel nucleic acids encoding human PRO secreted and transmembrane proteins. Extracellular proteins play important roles in the formation, differentiation and maintenance of multicellular organisms. The fate of many individual cells (for example proliferation, migration or differentiation) is typically governed by information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-FEB-1999; 99US-0119341P.
01-DEC-1999; 99WO-US028634.
01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   human; PRO; membrane bound protein; membrane bound r cell proliferation; cell migration; cell differentia mitogenic factor; survival factor; cytotoxic factor; differentiation factor; neuropeptide; hormone; cell differentiation factor; neuropeptide; hormone; cell
                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                   New PRO nucleic acid, useful for manufacturing a medicament diagnosing or treating tumor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               differentiation factor; neuropeptide; nor
receptor-ligand interaction; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Baker
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                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 24; 637pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard;
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Tumas
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A, Godowski PJ, Gurney AL, Sherwood
Tumas D, Watanabe CK, Wood WI, Zhang
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RESULT 132
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Gerritsen
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                                                                                                                                                               WPI; 2003-801144/75.
N-PSDB; ADC58726.
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18-OCT-1999;
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01-DEC-2000;
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                                                                                           nucleic acid, manufacturing
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ME, Goddard
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99US-00403297.
99WO-US028313.
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                                                                                           useful for preparing a recombinant PRO polypeptide a medicament for diagnosing or treating tumor.
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Tumas
                                           637pp;
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A, Godowski PJ, Gurney AL; Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
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Pred. No. 1.3e-144;
                                                English
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PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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RESULT 133
ADC55605;
                     ADC55605 standard; protein;
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Novel human 18-DEC-2003

secreted and transmembrane

protein

(first

entry

human; PRO; membrane bound protein; membrane bound recept-cell proliferation; cell migration; cell differentiation; mitogenic factor; survival factor; cytotoxic factor; differentiation factor; neuropeptide; hormone; cell recep 22-APR-2002; US2003087360-A1 Homo sapiens receptor-ligand 2002US-00127836 interaction; cytostatic; receptor; receptor;

This invention

relates

to novel nucleic acids encoding human PRO secreted

17-NOV-1998;

98US-0108802F

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Best Local S
Matches 285
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18-OCT-1999;
18-FEB-2000;
02-JUN-2000;
23-AUG-2000;
01-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         is often transmitted by secreted polypeptides (for example mitogenic factors, survival factors, cytotoxic factors, differentiation factors, neuropeptides and hormones) which are received and interpreted by diverse cell receptors or membrane bound proteins. These membrane bound proteins and receptors may be of use as pharmaceutical and diagnostic agents, such as in the blocking of receptor-ligand interactions. The courrent invention provides the amino acid sequences of novel human membrane bound receptors and proteins, along with the cDNA sequences encoding them. The novel proteins of the invention may have cytostatic activities through the stimulation of chondrocytes. The nucleic acids of the invention may be useful for the manufacture of a medicament for diagnosing or treating a tumour in a mammal. In addition, they may be useful for measuring or detecting the expression of a tumour associated gene. The present requence is the amino acid sequence of a human PRO protein of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention relates to novel nucleic acids encoding human PRO secreted and transmembrane proteins. Extracellular proteins play important roles in the formation, differentiation and maintenance of multicellular organisms. The fate of many individual cells (for example proliferation, migration or differentiation) is typically governed by information received from other cells and the immediate environment. The information
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                                                                                             KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL 240
                                                                                                                                                                       GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                                                                             LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
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                    PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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llarity 100.0%;
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Tumas
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A, Godowski PJ, Gurney
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Pred. No. 1.3e-144;
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285
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MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC

Query Match Best Local 9 Matches 28

Similarity

100.0%; pr

Score 1451; DB 7; Pred. No. 1.3e-144;); Mismatches 0;

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Gaps

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and transmembrane proceins. Extracellular proteins play important roles of in the formation, differentiation and maintenance of multicellular organisms. The fate of many individual cells (for example proliferation, migration or differentiation) is typically governed by information received from other cells and the immediate environment. The information is often transmitted by secreted polypeptides (for example mitogenic factors, survival factors, cytotoxic factors, differentiation factors, neuropeptides and hormones) which are received and interpreted by diverse cell receptors may be of use as pharmaceutical and diagnostic agents, such as in the blocking of receptor-ligand interactions. The current invention provides the amino acid sequences of novel human membrane bound receptors and proteins, along with the CDNA sequences encoding them. The novel proteins of the invention may have cytostatic activities through the stimulation of chondrocytes. The nucleic acids of the invention may be useful for the manufacture of a medicament for diagnosing or treating a tumour in a mammal. In addition, they may be useful for measuring or detecting the expression of a tumour associated gene. The present sequence is the amino acid sequence of a human PRO protein of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gerritsen
Smith V,
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N-PSDB; ADC58174.
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19-DEC-2001;
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Sequence 285
                                                                                                                                                                                                                                                                                                                                                                                                          This invention relates to novel nucleic acids encoding human PRO secreted
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n ME, Goddard
Stewart TA,
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2001US-00028072.
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A, Godowski PJ, Gurney AL, Sh
Tumas D, Watanabe CK, Wood WI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cmone; cell receptor;
chondrocyte; tumour.
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L, Sherwood S;
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RESULT 135
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KW Human;
KW chondr
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14-JUL-1998;
28-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; secreted and transmembrane protein; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNP-alpha; chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose uptake modulator; FFA uptake modulator; cell proliferation; cell differentiation; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; haemoglobin-associated disorder; thalassaemia; immune system cell infiltration; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                                                                                                                                                                              31-MAR-1997;
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99WO-US012733.
99WO-US01273.
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98WO-US018824.
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                                              ; 2001US-00887879.
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99WO-US028214.
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19-DEC-2001; 2001US-00028072

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The invention relates to isolated human PRO polypeptides (secreted and cransmembrane polypeptides) and the polymentions also relates to an antibody which specifically binds to a PRO (CC polypeptide, a method for stimulating the release of tumour necrosis cc factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and invertion of colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polymucleotides are useful in molecular biology, including uses as colon, breast propers, in chromosome and gene mapping, in generating the preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are cut useful in the development and screening of therapeutically useful cantides, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of cells, for stimulating the proliferation of or gene expression in periorte cells, for stimulating the proliferation of or gene expression in periorte cells, for cells, for inducing endothelial cells are utility to ells, for treating the proliferation of inner ear utricular supporting cells or cells, for stimulating the proliferation of inner ear utricular supporting cells or treating various bone and/or cartilage disorders such as sports injuries and architits. PRO polypeptides are useful for treating sports related joint problems, articular cartilage are useful for treating sports related joint infiltration. PRO polypeptides are also useful for treating various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypeptide of the convertion of the sequence of the support of the support of the convertion of the sequence atta for this patent is also available in confiltration.
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Matches 285
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Smith V, Stewart
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ME, Goddard A, Godowski PJ, Gurney AL, Sh
Stewart TA, Tumas D, Watanabe CK, Wood WI,
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L, Sherwood S;
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CC transmembrane) polypeptides (I). (I) is useful for stimulating the cells, for stimulating the growth by skeletal muscle cells or adipocyte cells, for cells, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of inner ear utricular supporting cells, cor stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of finer the stimulating of the release of a cytokine from PBMC cells, for inhibiting the binding of cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, certal, certical or liver tumour. The oligonucleotide probes care useful for isolating genomic and cDNA nucleotide sequences or antisense probes. (I) is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding cinteraction. A polynucleotide (II) encoding (I) is useful in the proparation of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and contentification, as chromosome marker, and for generating contentification, as chromosome marker, and for generating contents of the proper marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; secreted and transmembrane protein; PRO; Tumour necrosis factor alpha release; TNF-alpha release; glucose uptake modulator; FFA uptake modulator; cell proliferation stimulator; cell differentiation stimulator; cell differentiation inhibitor; cytokine release stimulator; tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; cervical tumour; liver tumour; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker.
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01-DEC-2000; 2000WO-US032678
19-DEC-2001; 2001US-00028072
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 12; SEQ ID NO 24; 637pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New PRO nucleic acid, useful for manufacturing a medicament diagnosing or treating tumor.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-APR-2002; 2002US-00125923
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gerritsen ME,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GETH ) GENENTECH INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Beresini M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
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art TA, Tumas D,
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A, Godowski PJ, Gurney AL, Sherwood :
Tumas D, Watanabe CK, Wood WI, Zhang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   285
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Zhang Z;
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RESULT 137
ADC69280
ID ADC692
XX ADC692
XX ADC692
XX O1-JAN
XX Human;
KW Human;
KW tumour
KW cancer
KW inner
KW skelet
KW inner
KW sports
KW rheuman
XX Inmune
XX Inmu
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Best Local S
Matches 285
     Baker KP, Beresini M,
Gerritsen ME, Goddard
Smith V, Stewart TA,
                                                                                                                                                                            03-MAR-2000; 2000US-0187202P.
30-MAY-2000; 2000WO-US011941.
01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; PRO; secreted polypeptide; transmembrane polypeptide; trumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cerliver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; F-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthr: rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO
                                                                                                                                                                                                                                                                                                                                                                                16-OCT-2003
                                                                                                                                                                                                                                                                                                                 21-MAY-2002; 2002US-00152375
                                                                                                                                                                                                                                                                                                                                                                                                                                     US2003194770-A1
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                                                                                                                      (GETH ) GENENTECH INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                system cell infiltration.
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        i A, Godov
Tumas D,
        Deforge L, Desnoyers L, Filva
A, Godowski PJ, Gurney AL, Sh
Tumas D, Watanabe CK, Wood WI,
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thalassaemia;
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New isolated, secreted and transmembrane PRO polypeptides and nucleic acids, useful for the diagnosis, prevention and/or treatment of tumors such as lung, colon, breast, prostate, rectal, cervical and/or liver
Claim 12; Fig 24; 637pp; English
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N-PSDB; ADC69259.
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The invention relates to isolated human PRO polypeptides (secreted and CC transmembrane polypeptides) and the polynucleotides encoding them. The CC invention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis CC factor-alpha (TWP-alpha) from human blood, a method for stimulating the prosence of a tumour in a mammal (e.g. adrenal, lung, CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polynucleotides are useful in molecular biology, including uses as CC antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in Generating either transgenic animals or knock-out animals which are CC useful in the development and screening of therapeutically useful CC reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of or gene expression in pericyte cells, for stimulating CC glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating cells or adipocyte cells, for stimulating cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating cartifular supportions on and/or cartilage disorders such as supporting and for treating carticular cartilage are useful for treating sports related joint problems, are inducing endothelial cell tube formation and for treating carticular cartilage are useful for treating sports related joint problems, carticular cartilage defects, osteoarthritis and theumatoid arthritis. PRO golypeptides which stimulate the release of proteoglycans of the problems and conditions which cased and useful for treating various mammalian haemoglobin-may benefit from enhanced local immune system cell infiltration. This cased the sequence represents a human PRO polypeptide of the invention. With

Query Match Best Local

Similarity

100.0%; Score 1451; DB 7; 100.0%; Pred. No. 1.3e-144;

Length

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                                                                                                                           GEGNSSONSRNKRAVOGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
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                                                                                                                                                                         LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                                                                                            MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
               PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                     KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDBLSLVTLFRCIQNMPETL
                                                                                                      GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
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Page 1

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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The convention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis caproliferation or differentiation of chondrocyte cells and a method for stimulating the prosence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as complying the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides may also complying the preparing PRO polypeptides by recombinant techniques and in generating generating properties may also be used in preparing PRO polypeptides by recombinant techniques and in creagents. The development and screening of therapeutically useful captured in the development and screening of therapeutically useful captured colors, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FFA by skeletal muscle cells, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for stimulating endothelial cell tube formation and for treating color arthricines and cell tube formation and for treating and arthricines and cell tube formation and for treating the uptake of cells, for stimulating the uptake of proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for stimulating the uptake of the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for stimulating the uptake of the proliferation of captured to the release of proteoglycans.
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Smith V,
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DB; ADC48148.
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Baker KP, Gerritsen

Beresini M, ME, Goddard

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Deforge L, 1, Godowski

Desnoyers L, PJ, Gurney

Filvaroff E, L, Sherwood

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polypeptide; TNF-alpha;

17-AUG-1998; 02-JUN-1999; 25-AUG-1999; 30-MAR-2000; 30-MAY-2000; 01-DEC-2000; 19-DEC-2001; 22-APR-2002; US2003087354-A1. (GETH) GENENTECH INC 99WO-US012252. 99US-00380137. 2000WC-US008439. 2000WO-US014941. 2000WO-US032678. 2001US-00028072. 2002US-00127827 98US-0096891P

Gerritsen Smith V, Baker KP, stewart Beresini M, ME, Goddard A, Go Deforge L, 1, Godowski ō L, Desnoyers L, Filvaroff E, Gski PJ, Gurney AL, Sherwood S; Watanabe CK, Wood WI, Zhang Z; Gao W;

diagnosing New PRO nucleic acid, useful for manufacturing a medicament for ö treating tumor.

Claim 12; Fig 24; 637pp; English

CC The invention relates to isolated human PRO polypeptides (secreted and Ct transmembrane polypeptides) and the polypucleotides encoding them. The CC invention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the prosing the presence of a tumour in a mammal (e.g. adrenal, lung, CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polymucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating of antisense RNA and DNA and in gene therapy. The polymucleotides may also CC useful in the development and screening of therapeutically useful creagents. The PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are creagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of cells, for stimulating differentiation of adipocyte cells, for stimulating differentiation of adipocyte cells, for

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RESULT 141
ADC80209
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Best Local S
Matches 285
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                                                                                                                                                                                                                                                                                                                                                                                                    Human; secreted and transmembrane protein; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte; tumour; cancer; adrenal; lung; colon, breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; rectum; kidney; cervix; FPA uptake modulator; cell proliferation; cell differentiation; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; pericyte cell; the formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia; immune system cell infiltration; chromosome mapping; gene mapping;
   22-DEC-1998;
01-DEC-1999;
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   98US-0113511P
99WO-US028634
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Pred. No. 1.3e-144;
); Mismatches 0;
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MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC

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KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL

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GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated nucleic acid encoding a PRO polypeptide, e. PRO4978, useful in molecular biology, chromosome and gengenerating antisense RNA and DNA, and in gene therapy.
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01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
                                                                                                   Sequence
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  Local Similarity 100
les 285; Conservative
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ME, Goddard A, God
MB, Tumas F
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Stewart TA,
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100.0%; Score 1451; DB 7; 100.0%; Pred. No. 1.3e-144; tive 0; Mismatches 0;
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A, Godowski PJ, Gurney AL, Sh
Tumas D, Watanabe CK, Wood WI,
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L, Sherwood
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The invention relates to isolated human PRO polypeptides (secreted and CC transmembrane polypeptides) and the polypuruleotides encoding them. The CC invention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis and control of the presence of a tumour in a mammal (e.g. adrenal, lung, CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polymucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating a cristense RNA and DNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in CC generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful creagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; pericyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; hemmatoid arthritis; hemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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19-DEC-2001;
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DB; ADD10715.
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ME, Goddard
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2000WO-US032678.
2001US-00028072.
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A, Godowski PJ, Gurney J
Tumas D, Watanabe CK, W
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AL, Sherwood S;
Thang Z;
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Best Local
              15-SEP-2000;
20-JUN-2001;
09-JUL-2001;
20-FEB-2002;
                                                                                                                                                                                                                                        human; secreted protein; transmembrane protein; cardiovascular disorde endothelial disorder; angiogenic disorder; myocardial infarction; cardiac hypertrophy; trauma; cancer; age-related macular degeneration; angiogenesis; endothelial cell apoptosis; smooth muscle cell growth; endothelial cell apoptosis;
                                                                                                                                                                                                           Homo sapiens
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                2000US-0232887P.
2001WO-US019692.
2001WO-US021735.
2002US-00081056.
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ilarity 100.0%;
Conservative (
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Pred. No. 1.3
0; Mismatches
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L.3e-144;
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Best Local S
Matches 285
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Godowski
Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; t cancer; adrenal; lung; colon; breast; prostate; rectum; kidn liver; microvascular endothelial cell; glucose; FFA;
                                                                                                                                                                                                                01-JAN-2004
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disorder in
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PJ, Gurney AL,
CK, Williams P
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for treating a cardiovascular, endothelial, or angiogenic
a mammal, such as cancer or age-related macular degeneration.
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L, Hillan
PM, Wood
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Pred. No. 1.3
); Mismatches
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KJ, Marsters SA,
WI, Ye W;
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A, Pan J
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, д
                                  kidney;
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                                  cervix;
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consequents. The development and screening of therapeutically useful creagents. The PRO polypeptides or antibodies are used in preparing a commedicament for treating a condition responsive to the polypeptides or comment of the polypeptides or the polypeptides or comment of the polypeptides of the proliferation of or dene expression in pericyte cells, for stimulating compositions of or gene expression in pericyte cells, for stimulating compositions of or gene expression in pericyte cells, for stimulating compositions because of proliferation of inner ear unticular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating commence the release of proteoglycans commence of the proliferation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the device property and contains or knock-out animals which are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-DEC-1999;
01-DEC-2000;
19-DEC-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New secreted and transmembrane PRO polypeptides and nucleic acids useful for detecting a tumor, stimulating the release of proteoglycans from cartilage and stimulating the proliferation of endothelial cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gerritsen ME,
Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim
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DB; ADC47596.
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ME, Goddard
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2000WO-US032678
2001US-00028072
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A, Godowski
Watanabe CK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Desnoyers L, F
PJ, Gurney AL,
Wood WI, Zhan
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L, Gurney
lang Z;
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Query Match Best Local Similarity Matches 285; Conserv

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                                                                                                                                                                                                                                                                Gerritsen
Smith V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        glucose uptake modulator; FFA uptake modulator; cell proliferation; cell differentiation; skeletal muscle cell; adipocyte cell; perioyte cell; utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-NOV-2000;
01-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-SEP-1998;
01-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sports injury; proteoglycan; articular cartilage defect; osteoarthri rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia; immune system cell infiltration; chromosome mapping; gene mapping; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; secreted and transmembrane protein; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell;
                                                                            New PRO nucleic acid, useful for
                                                                                                                                                                                                                                                                                                                                         Baker KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel human secreted and transmembrane protein PRO738.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-APR-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                     (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-FEB-2000;
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                                                                                                                                                    2003-801143/75
)B; ADC79656.
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                                                                                                                                                                                                                                                                ME, God
Stewart
                                                                                                                                                                                                                                                            Beresini M,
ME, Goddard
Stewart TA,
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2000WO-US030952.
2000WO-US032678.
2000US-00028072.
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                                                                                                                                                                                                                                                                . A, Godov
Tumas D,
                                                                                                                                                                                                                                                            Deforge L, Desnoyers L, Filva
A, Godowski PJ, Gurney AL, Sh
Tumas D, Watanabe CK, Wood WI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          285 AA
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                                                                            a medicament for
                                                                                                                                                                                                                                                    Filvaroff E, Gau
AL, Sherwood S;
Zhang Z;
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CC useful in the development and screening of therapeutically useful are reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FRA (free fatty acid) by skeletal muscle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating tree proliferation of or gene expression in pericyte cells, for controlling the proliferation of inner ear utricular supporting cells or treating various bone and/or cartilage endothelial cell tube formation and for controlling various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of coroteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides which stimulate the release of coroteoglycans from cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various thalassaemias cand conditions which may benefit from enhanced local immune system cell infiltration. This sequence data for this patent is also available in celectronic format from USPTO at sequence is also available in celectronic format from USPTO at sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           colon, breast, prostate, rectal, kidney, cervical and liver tumours). polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are
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ADD11347 standard; protein; ADD11347

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(first entry)

Human secreted/transmembrane PRO polypeptide

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                                                                                                                                                                                                                                                                                                                                                                                                  CC The invention relates to an isolated nucleic acid encoding a secreted and transmembrane polypeptide (PRO). The nucleic acid, a polypeptide encoded CC by the nucleic acid, or an agonist or antagonist, is used to treat a CC cardiovascular, endothelial, or angiogenic disorder in a mammal, CC preferably a human. The human may have suffered a myocardial infarction CC or has cardiac hypertrophy, trauma, a cancer, or age-related macular CC degeneration. The cardiac hypertrophy is characterised by the presence of CC an elevated level of PGF-2 alpha. A PRO polypeptide, given in the CC specification, or an agonist is used to inhibit or stimulate endothelial CC cell growth in a mammal. PRO21 or an agonist is used to induce cardiac hypertrophy. PRO1376 or PRO1449 is used to stimulate angiogenesis. A PRO PRO4302 or an agonist is used to induce endothelial cell apoptosis. A PRO CC polypeptide, given in the specification, or an agonist is used to continue endothelial cell apoptosis. A PRO CC polypeptide, given in the specification, or an agonist is used to continue endothelial cell apoptosis. A PRO CC polypeptide, given in the specification, or an agonist is used to continue endothelial cell apoptosis. A PRO CC polypeptide, given in the specification, or an agonist is used to continue endothelial cell tube formation. The present sequence represents the amino acid CC sequence of a PRO polypeptide of the invention.
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated nucleic acid encoding a secreted and transmembrane polypeptide, useful for treating a cardiovascular, endothelial, angiogenic disorder in a mammal, such as cancer or age-related r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Godowski
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09-JUL-2001; 2001WO-US021735
20-FEB-2002; 2002US-00081056
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PJ, Gurney AL, H
DK, Williams PM,
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KJ, Marsters SA,
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RESULT 147
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XW Human;
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XW Cances
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The C invention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for C colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating CC antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in CC generating either transgenic animals or knock-out animals which are cuseful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
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01-DEC-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New secreted and transmembrane PRO nucleic acids and polypeptides, for detecting a tumor, stimulating the release of tumor necrosis for alpha from blood and stimulating the release of proteoglycans from cartilage.
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N-PSDB; ADD09125.
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ME, Goddard
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2000WO-US032678
2001US-00028072
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Tumas D,
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a, Godowski PJ, Gurney AL, Sh
Numas D, Watanabe CK, Wood WI,
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RESULT 148
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Best Local 9
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   24-NOV-1997;
16-SEP-1998;
25-AUG-1999;
22-FEB-2000;
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                                                                                                                                                                                                                                                                                                                                                                                              cell proliferation stimulator; cell differentiation stimulator; cell differentiation inhibitor; cytokine release stimulator; tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; cervical tumour; liver tumour; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                glucose uptake modulator;
                                                                                                                                                        15-MAY-2002;
                                                                                                                                                                                                                                                                           US2003203438-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          secreted and transmembrane protein; PRO; necrosis factor alpha release; TNF-alpha release; e uptake modulator; FFA uptake modulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
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   97US-0066511P.
98WO-US019330.
99US-00380139.
2000WO-US004414.
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                                                                                                                                                        2002US-00146786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
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Pred. No. 1.3
0; Mismatches
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PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL

PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL

181

KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL

240

180

120

180

120 60

KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL

GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP

GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE

121 121 61 61 Matches

Similarity

Conservative

0

Indels

0;

MDDSTERBOSRLTSCLKKRBEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC

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CC stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating cells, for stimulating cells, for stimulating cells, for stimulating of cells, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, created, cervical or liver tumour. The oligonuclectide probes cells in cells in cells in cells in cells in a seasys to identify other proteins or molecules involved in binding cell in assays to identify other proteins or molecules involved in binding cells interaction. A polymclectide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the creating cells in the development and certain cells cells, therapy, for cell cells, therapy is screening of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g. cells sequence of anotel human secreted and transmembrane PRO acid sequence of a novel human secreted and transmembrane PRO
                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        transmembrane) polypeptides (I). (I) is useful for stimulating the release of TNF-alpha from human blood, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation of chandrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the release of proteoglycans from cartilage, for cells, for stimulating the release of proteoglycans from cartilage, for
                                                                                         Sequence 285 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 PRO4978, useful in molecular biology, chromosome and gene mapping, generating antisense RNA and DNA, and in gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-DEC-2000; 2000WO-US032678
19-DEC-2001; 2001US-00028072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Smith
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ME, Goddard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       describes 305 nucleic acids encoding polypeptides (1). (1) is useful for
                        100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IA, Godow
Tumas D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Deforge L, Desnoyers L, Filvaroff E,
A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z
Score 1451; DB 7;
Pred. No. 1.3e-144;
; Mismatches 0;
                                             Length 285;
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RESULT 149

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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The cinvention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis CC polypeptide, a method for stimulating the release of tumour necrosis CC polypeptide, a method form human blood, a method for stimulating the prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as CC polynucleotides are useful in molecular biology, including uses as CC polynucleotides are useful in molecular biology, including uses as CC polynucleotides are useful in molecular biology, including uses as CC polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in CC generating either transgenic animals or knock-out animals which are CC useful in the development and screening of therappeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of CC glucose or FFA by skeletal muscle cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating the uptake of the proliferation of inner ear utricular supporting cells or T-lymphocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-DEC-1999;
01-DEC-2000;
19-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; hemomatoid arthritis; hemoglobin-associated disorder thalassaemia; immune system cell infiltration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New isolated, secreted and transmembrane PRO polypeptides and nu-
acids, useful for detection of tumors, modulating the uptake of or free fatty acids and stimulating the release of proteoglycans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gerritsen ME, Go
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Baker KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-MAY-2002; 2002US-00152374
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 12; Fig
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DB; ADD51977.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard;
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Æ, Goddard
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; 2000WO-US032678.
; 2001US-00028072.
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A, Godowski PJ, Gurney.
Tumas D, Watanabe CK, W
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Best Local S
Matches 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from the USPTO website at segdata.uspto.gov.
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                                                                                                                                                                                                                                                                                                               MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                        PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                                                        KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                                                                                          GEGNSSONSRNKRAVOGPEETVTODCLOLIADSETPTIOKGSYTFVPWLLSFKRGSALEE
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PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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Pred. No. 1.3e-144;
Mismatches 0;
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31-MAR-1997;
12-JUN-1998;
14-JUL-1998;
28-AUG-1998;
10-SEP-1998;
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                                            97WO-US005230.
98WO-US012456.
98WO-US014552.
98WO-US017888.
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06-JAN-2000

06-JAN-2000

11-FEB-2000

18-FEB-2000

18-FEB-2000

24-FEB-2000

24-FEB-2000

02-MAR-2000

02-MAR-2000

02-MAR-2000

15-MAR-2000

15-MAR-2000

10-MAR-2000

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11-MAR-2000

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16-SEP 1998
17-SEP 1998
29-OCT 1998
29-OCT 1998
29-OCT 1999
08-MAR 1999
10-MAR 1999
11-MAR 1999
11-MAR 1999
11-MAR 1999
11-MAR 1999
11-SEP 1999
11-SEP
2000WO-USC004314
2000WO-USC004341
2000WO-USC004341
2000WO-USC004341
2000WO-USC004914
2000WO-USC004914
2000WO-USC005601
2000WO-USC005601
2000WO-USC005881
2000WO-USC005881
2000WO-USC005881
2000WO-USC007377
2000WO-USC007377
2000WO-USC014942
2000WO-USC014941
2000WO-USC014941
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2000WO-USC014042
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2000WO-US006319
99WO-US008615
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99WO-US031243.
99WO-US031274.
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99WO-US028634.
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99WO-US021090.
99WO-US021547.
99WO-US023089.
99WO-US028214.
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99WO-US020111.
99WO-US020594.
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99WO-US000106.
99WO-US005028.
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10-MAY-2001

110-MAY-2001

18-MAY-2001

25-MAY-2001

25-MAY-2001

25-MAY-2001

01-JUN-2001

01-JUN-2001

05-JUN-2001

14-JUN-2001

19-JUN-2001

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2001US-00886342.
2001US-00887879.
2001US-00887879.
2001WO-US020116.
2001WO-US021735.
2001US-00908827.
2001US-00908827.
2001US-00927419.
2001US-00931836.
2001US-00931836.
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2001US-00866034.
2001WG-US017092.
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2001US-00874503.
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(GETH) GENENTECH INC.

Baker KP, Beresini M, Gerritsen ME, Goddard Smith V, Stewart TA, A, Go Tumas Deforge L, Desnoyers L, Filvaroff E, A, Godowski PJ, Gurney AL, Sherwood S Tumas D, Watanabe CK, Wood WI, Zhang 1 S; Gao

WPI; N-PSDB; 2003-852599/79. DB; ADD52717.

New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or PRO4978, useful in chromosome and gene mapping, in generating antisense RNA and DNA, and in the treatment of cancer.

Claim 12; Fig 24; 638pp; English

CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung, CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polynucleotides are useful in molecular biology, including uses as CC pylridisation probes, in chromosome and gene mapping, in generating CC antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in CC generating either transgenic animals or knock-out animals which are CC useful in the development and screening of therapeutically useful CC reagents. The PRO polypeptides or antibodies are used in preparing a CC medicament for treating a condition responsive to the polypeptides or CC antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of CC glucose or FRA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating CC proliferation of or gene expression in pericyte cells, for stimulating CC proliferation of or gene expression in pericyte cells, for stimulating CC cells, for inducing endothelial cell tube formation and for treating CC various bone and/or cartilage disorders such as sports injuries and CC arthitis. PRO polypeptides which stimulate the release of proteoglycans of from cartilage are useful for treating sports-related joint problems, PRO CC polypeptides are also useful for treating sports-related joint problems, PRO CC properties of the invention. Note: The Scapence data for this pattent is also available in electronic format from CC the USPTO website at segdata.uspto.gov. The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypucleocides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for

Sequence 285

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Best Local Similarity
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02-JUN-1999; 99WO-US012252.
01-DEC-20000; 2000WS-00380137.
01-DEC-20000; 2000WG-US032678.
19-DEC-2001; 2001US-00028072.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; secreted and transmembrane protein; PRO;
Tumour necrosis factor alpha release; TNF-alpha release;
glucose uptake modulator; FFA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          lung tumour; colon tumour; breast tumour; prostate tumour; rectal
cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
                                                                                                       New isolated nucleic acid end
PRO4978, useful in molecular
                                                                                                                                                                                                                                                                                           Gerritsen
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                                                                                                                                                                                                                                                               Beresini M,
ME, Goddard
Stewart TA,
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100.0%; Pred. No. 1.3e-144;
                                                                                                                                                                                                                                                               Deforge L, Desnoyers L,
A, Godowski PJ, Gurney /
Tumas D, Watanabe CK, W
                                                                           encoding a PRO polypeptide, e.g. PRO1114 lar biology, chromosome and gene mapping, and DNA, and in gene therapy.
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                                                                                                                                                                                                                                                            i, Filvaroff E, G
y AL, Sherwood S;
Wood WI, Zhang Z;
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                                                                                                    PRO1114 or mapping, in
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CC The invention describes 305 nucleic acids encoding PRO (secreted and Cransmembrane) polypeptides (I), (I) is useful for stimulating the collection of TNF-alpha from human blood, for modulating the uptake of CC glucose or FFA by skeletal muscle cells or adipocyte cells, for Stimulating the proliferation or differentiation of chondrocyte cells, for cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of Tymphocyte cells, for stimulating the proliferation of Tymphocyte cells, for stimulating the proliferation of Tymphocyte cells, for detecting the release of a cytokine from PBMC cells, for inhibiting the binding of the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour. The oligonuclectide probes are useful for isolating genomic and cDNA nuclectide sequences or are useful for isolating genomic and cDNA nuclectide sequences or and gene mapping, in generation of antisense RNA and DNA, in the company of therapeutically useful research in the development and generation of PRO polypeptide, for generating transgenic animals or chromosome dathification, as chromosome marker, and for generating genomesome of therapeutically useful research; in gene therapy, for chromosome dathification, as chromosome marker, and for generating genomesome. (I) and (II) are useful in diagnostic assays for PRO, e.g. acid sequence of a novel human secreted and transmembrane PRO
                                                                                                                                                                                                                                                                                                                                                                                                            Best Loc
Matches
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241
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               285
                          PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL 285
                                                                                                                                                                GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                                                                     GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE 180
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PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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Pred. No. 1.3e-144;
                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                QRKKVHVFGDELSLVTLFRCIQNMPETL
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RESULT 152
ADD37140
ID ADD371
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ADD37140 standard; protein; 285

(first entry)

secreted/transmembrane PRO polypeptide #49.

human; secreted protein; transmembrane protein; cardiovascular disorde endothelial disorder; angiogenic disorder; myocardial infarction; cardiac hypertrophy; trauma; cancer; age-related macular degeneration; angiogenesis; endothelial cell apoptosis; smooth muscle cell growth; endothelial cell tube formation disorder;

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                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to an isolated nucleic acid encoding a secreted and CC transmembrane polypeptide (PRO). The nucleic acid, a polypeptide encoded by the nucleic acid, or an agonist or antagonist, is used to treat a CC cardiovascular, endothelial, or angiogenic disorder in a mammal, CC preferably a human. The human may have suffered a myocardial infarction CC or has cardiac hypertrophy, trauma, a cancer, or age-related macular CC degeneration. The cardiac hypertrophy is characterised by the presence of CC an elevated level of PGF-2 alpha. A PRO polypeptide, given in the CC specification, or an agonist is used to inhibit or stimulate endothelial CC cell growth in a mammal. PRO21 or an agonist is used to induce cardiac CC hypertrophy. PRO1376 or PRO1449 is used to stimulate angiogenesis. CC PRO4302 or an agonist is used to induce endothelial cell apoptosis. A PRO CC polypeptide, given in the specification, or an agonist is used to cell growth is used to induce endothelial cell apoptosis. A PRO CC polypeptide, given in the specification, or an agonist is used to cell growth. The present sequence represents the amino acid CC sequence of a PRO polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated nucleic acids encoding a secreted and transmembrane polypeptide for treating a cardiovascular, endothelial, or angiogenic disorder in a mammal, such as cancer or age-related macular degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-SEP-2000; 2000US-0232887P.
2001W0-US01963-
09-JUL-2001; 2001W0-US021735.
20-FEB-2002; 2002US-00081056.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 11; SEQ ID NO 98; 492pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                   Sequence
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                                                                                                                                                                                                                                                                            MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                                                 KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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                       PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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                                                                                                                                                                                                                                                                                                                      Conservative
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Williams PM,
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Pred. No. 1.3e-144;
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n KJ, Marsters S
d WI, Ye W;
                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                I QRKKVHVFGDELSLVTLFRCI QNMPETL
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RESULT

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JADD51426
JADD51426
AC ADD5
XX ADD5
XX ADD5
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XX
                     The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The cinvention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis complypeptide, a method for stimulating the release of tumour necrosis contenting the presence of a tumour in a meamal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating cantisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are cuseful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides of stimulating differentiation of adipocyte cells, for modulating the uptake of glucose or FFA by skeletal muscle cells, for modulating the uptake of conditions bone and/or cartilage disorders such as sports injuries and cartilage are are leafly disorders such as sports injuries and cartilage are are leafly disorders such as sports injuries and cartilage are leafly disorders such as sports injuries and cartilage are leafly disorders such as sports injuries and cartilage are leafly for treating sports related foint problems.
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Gerritsen
Smith V,
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   various bon
arthritis.
from carti
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01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New secreted and transmembrane PRO nucleic acids and polypeptides, useful for detecting the presence of a tumor, stimulating the release of tumor necrosis factor alpha from human blood and treating, e.g. organ failure.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-852597/79.
N-PSDB; ADD51425.
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n ME, Goddard
Stewart TA,
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   PRO polypeptides
lage are useful fo
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Tumas
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
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18-OCT-1999;
18-FEB-2000;
24-AUG-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; PRO; secreted polypeptide; transmembrane polypeptide; trumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; hammoglobin-associated disorder thalassaemia;
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                                                     ; 99WO-US020111.
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Pred. No. 1.3e-144;
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New isolated nucleic PRO4978, useful in mo cleic acid encoding a F in molecular biology, sense RNA and DNA, and a PRO polypeptide, e.g. gy, chromosome and gene of and in gene therapy. mapping, i or

Claim 24; 637pp; English.

convention also relates to an antibody which specifically binds to a propertie, a method for stimulating the release of tumour necrosis carcoralpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as chybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene thoragy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or kinock-out animals which are useful in the development and screening of therapeutically useful cantibodies. The PRO polypeptides or antibodies are useful in the development and screening of therapeutically useful cantibodies. Such as tumours, for stimulating and inhibiting proliferation of for gene expression in perior cells, for stimulating differentiation of adipocyte cells, for stimulating the uptake of cells, for inducing endothelial cells, for adipocyte cells, for stimulating tration of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and contitular cartilage are useful for treating sports-related joint problems, recurrence the received are such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence data for this patent is also available in electronic format from USPTO at sequence shand. cransmembrane polypeptides) isolated lated human PRO polypeptides (secreted and the polynucleotides encoding them antibody which specifically binds to a

Sequence 285 B

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llarity 100.0%;
Conservative (
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Pred. No. 1.3e-144;
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ADDO1659
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AC ADDO16
AC ADDO1
The invention relates to isolated human PRO polypeptides (secreted and CC transmembrane polypeptides) and the polynucleotides encoding them. The CC invention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrena), lung, CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polynucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating CC antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in CC useful in the development and screening of therapeutically useful CC reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation CC of human microvascular endothelial cells, for modulating the uptake of CC stimulating differentiation of adipocyte cells, for stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-AUG-1998; 98US-0096143P.
02-UUN-1999; 99W0-US012252.
30-MAR-2000; 2000WS-00380137.
30-MAR-2000; 2000WO-US008439.
01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
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Gerritsen
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 PRO4978, useful in molecular biology, chromosome and gene mapping, generating antisense RNA and DNA, and in gene therapy.
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
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01-DEC-2000;
19-DEC-2001;
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                                                                                                                                                                                                                                      Human; secreted and transmembrane protein; PRO; Tumour necrosis factor alpha release; TNF-alpha release; glucose uptake modulator; FPA uptake modulator; cell proliferation stimulator; cell differentiation stimulator; cell differentiation inhibitor; cytokine release stimulator; tumour tumour; colon tumour; breast tumour; prostate tumour; rectal cervical tumour; liver tumour; chromosome mapping; gene mapping;
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                            2000US-0209832P
2000WO-US032678
2001US-00028072
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                                                                                                                                                                                                                      chromosome identification;
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(GETH") GENENTECH

Baker KP, Gerritsen Smith V,

Stewart

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The invention describes 305 nucleic acids encoding PRO (secreted and CC transmembrane) polypeptides (I). (I) is useful for stimulating the crelease of TNF-alpha from human blood, for modulating the uptake of CC glucose or FFA by skeletal muscle cells or adipocyte cells, for Stimulating the proliferation or differentiation of chondrocyte cells, for cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, cor stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating of the release of a cytokine from PRMC cells, for inhibiting the binding of the release of a cytokine from PRMC cells, for inhibiting the binding of CC appetide to factor VIIA, for inhibiting the differentiation of adipocyte CC cells, for stimulating proliferation of endothelial cells, for detecting CC the presence of tumour in a mammal. The tumour is lung, colon, breast, cells, rectal, cervical or liver tumour. The oligonucleotide probes are useful for isolating genomic and cDNA nucleotide sequences or care useful for isolating genomic and cDNA nucleotide sequences or care useful for isolating other proteins or molecules involved in binding clinteraction. A polymucleotide (II) encoding (I) is useful in the care massays to identify other proteins or molecules involved in binding clinteraction. A polymucleotide (II) encoding (I) is useful in the care massays with the proteins or dependent and considered therapy, for chromosome identification, as chromosome marker, and for generating chromosome identification, as chromosome marker, and for generating considered in anti-cI)-antibody is useful in diagnostic assays for PRO, e.g. defection is expression in securities of a serven and for serven. and for serven. and for serven.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO
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Pred. No. 1.3e-144;
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ADD92158 standard; protein;

(first entry

PRO polypeptide

Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breest; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; Prymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthribis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.

2002US-00156841

2000US-0187202P. 2000WO-US032678. 2001US-00028072.

(GETH) GENENTECH INC

Stewart Beresini M, Goddard wart TA, Tumas Deforge L, Desnoyers L, A, Godowski PJ, Gurney *I* Tumas D, Watanabe CK, Wo Wood WI, Filvaroff E, Sherwood S WI, Zhang Σ

WPI; 2003-900159/82 N-PSDB; ADD92157.

Two hundred and seventy five nucleic acids encoding PRO Juseful for treating pericyte-associated tumors; diabetes and/or cartilage disorders, e.g. arthritis. PRO polypeptides, betes and various bone

Claim 12; SEQ ID NO 24; 636pp; English

Query Match Best Local S Matches 285

Similarity

Local Sim hes 285;

Sequence 285 AA;

The invention relates to isolated human PRO polypeptides (secreted and CC transmembrane polypeptides) and the polymucleotides encoding them. The CC invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis CC factor-alpha (TMF-alpha) from human blood, a method for stimulating the prosence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as compounted to the preparing pRO polypeptides by recombinant techniques and in generating enther transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful created in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of fundan microvascular endothelial cells, for modulating the uptake of stimulating differentiation of adipocyte cells, for stimulating cells or T-lymphocyte cells, for inducing endothelial cell tube formation and/or cartilage disorders such as sports injuries and cell tube formation as ported of proteoglycans from cartilage are useful for treating sports related joint problems, carting a defect. Others are useful arthritis. PRO polypeptides which stimulate the release of proteoglycans of contributions are useful for treating sports related joint problems, processing arthritis. PRO polypeptides which stimulate the release of proteoglycans of the problems, process are useful for treating sports related joint problems, processing and related point problems, processing and related point problems.

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28-AUG-1998
10-SEP-1998
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14-SEP-1998
14-SEP-1998
16-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                          Human; PRO; secreted polypeptide; transmembrane polypeptide; trumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; PFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injur; proteoglycan; articular cartilage defect; osteoarthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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associated disorders such as various thalassaemias and conditions which
may benefit from enhanced local immune system cell infiltration. This
sequence represents a human PRO polypeptide of the invention. Note: The
sequence data for this patent is also available in electronic format fro
USPTO at seqdata.uspto.gov/sequence.html.
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; 2001WO-US020116.

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; 2001US-009273796.

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L, Filvaroff E, G y AL, Sherwood S; Wood WI, Zhang Z;

Gao

WPI; 2003-900165/82.

Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.

Claim 12; SEQ ID NO 24; 636pp; English.

The invention relates to isolated human PRO polypeptides (secreted and Ct transmembrane polypeptides) and the polymucleotides encoding them. The cinvention also relates to an antibody which specifically binds to a PRO polypeptide; a method for stimulating the release of tumour necrosis Ct factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The Ct polynucleotides are useful in molecular biology, including uses as Ct antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are cuseful in the development and screening of therapeutically useful cantides. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or stimulating and inhibiting proliferation of fundam microvascular endothelial cells, for modulating the uptake of Ct glucose or FRA by skeletal muscle cells or adjocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating call coll tube formation and for treating the proliferation of inner ear utricular supporting cells, for stimulating call coll tube formation and for treating calls call call tube formation and for treating calls call call tube formation and for treating colont problems, sequence data for this patent is also available in electronic format from cascolated disorders such as various thalassaemias and conditions which can sequence at a sequence at also available in electronic format from the sequence at a sequence. The

Sequence 285 AA;

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Matches 285; Conserv
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 Score 1451; DB 7;
Pred. No. 1.3e-144;
Mismatches 0;
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                             PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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31-MAR-1997; 12-JUN-1998; 2002US-00123213

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17-SEP-1998
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11-MAR-1999
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01-SEP-1999 14-JUL-1998; 28-AUG-1998; 10-SEP-1998; 97WO-US005230.
98WO-US014552.
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98WO-US01993.
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16-AUG-2001; 2001US-00931836.
19-DEC-2001; 2001US-00028072.
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(GETH) GENENTECH

Baker KP, Beresin Gerritsen ME, Goo Smith V, Stewart Beresini M, ME, Goddard TA, IA, Godow Tumas D, Deforge L, Desnoyers L, Filvaroff E, a, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z N Gao

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N-PSDB; 2003-900167/82. DB; ADE03667.

Two hu and/or hundred and seventy five nucleic acids encoful for treating pericyte-associated tumors, for cartilage disorders, e.g. arthritis. encoding PRO polypeptides, nors, diabetes and various bone

24; 637pp; English.

The invention relates to isolated human PRO polypeptides (secreted and convention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (PMF-alpha) from human blood, a method for stimulating the gracial and liver tumours. The colon, breast, prostate, rectal, kidney, cervical and liver tumours. The polyprides are useful in molecular biology, including uses as colon, breast, prostate, rectal, kidney, cervical and liver tumours. The polypridisation probes, in chromosome and gene mapping, in generating cantisense RNA and DNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are cused in preparing PRO polypeptides by recombinant techniques and in generating either treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of or gene expression in pericyte cells, for stimulating color provides are notothelial cells, for modulating the uptake of glucose or FRA by skeletal muscle cells, for adipocyte cells, for stimulating calliferantiation of adipocyte cells, for stimulating colliferation of or gene expression in pericyte cells, for stimulating calliferation of or gene expression in pericyte cells, for stimulating calliferantial cell tube formation and for treating cartilage are useful for treating sports injuries and cartilage are useful for treating sports injuries and cartilage are useful for treating sports. Placed of problems, completed are also useful for treating sports related joint problems, completed disorders such as various thalassaemias and conditions which associated disorders such as various thalassaemias and conditions which completed are also useful for treating various mammalian hamoglobin-calliferance and security of the invention. This calliferance are also as a problem of the invention of the color of the se

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The invention describes 305 nucleic acids encoding PRO (secreted and CC transmembrane) polypeptides (I) (I) is useful for stimulating the CC release of TNP-alpha from human blood, for modulating the uptake of CC glucose or FRA by skeletal muscle cells or adipocyte cells, for CC stimulating the proliferation or differentiation of chondrocyte cells, for Stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of recoglycans from cartilage, for CC stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of From PBMC cells, for inhibiting the binding of the release of a cytokine from PBMC cells, for inhibiting the binding of CC eells, for stimulating proliferation of endothelial cells, for detecting the presence of tunour in a mammal. The tumour is lung, colon, breast, CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes CC are useful for isolating genomic and cDNA mucleotide sequences or antisense probes. (I) is also useful as therapeutic agent, PRO is useful in assays to identify other proteins or molecules involved in binding CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the CC knockout animals which in turn are useful in the development and
                 RESULT 160
ADE31965
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01-DEC-2000;
19-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.
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Gerritsen ME, Goddard
Smith V, Stewart TA,
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                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 12; SEQ ID NO 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N-PSDB;
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DB; ADE31964.
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2001US-00028072
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Deforge L, Desnoyers L, Filvaroff E, A, Godowski PJ, Gurney AL, Sherwood S Tumas D, Watanabe CK, Wood WI, Zhang
                                                                                                                                                                                                                                                                                                                                                                                                                 636pp; English.
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L, Sherwood S;
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Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cerliver; microvascular endothelial cell; glucose; FPA; skeletal muscle cell; adipocyte cell; pericyte cell; skeletal muscle cell; adipocyte cell; FT-lymphocyte cell; numer ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage defect; osteoarthr: sports injury; proteoglycan; articular cartilage defect; osteoarthr: rheumatoid arthrilis; haemoglobin-associated disorder thalassaemia;
                                                                                                                                                                                                                               Human PRO polypeptide #12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 screening of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating probes. An anti-(1)-antibody is useful in diagnostic assays for PRO, detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. (1) and (11) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO
                                                                                                                                                                                                                                                                                                                                                               ADE21897 standard; protein; 285
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Pred. No. 1.3e-144;
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RESULT 161
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ID ADE218
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XX Human
DE Human
XX Human
XX Human
XX Human
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XX Inmun
XX Inner
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31-MAR-1997;
12-JUN-1998;
14-JUL-1998;
28-AUG-1998;
10-SEP-1998;
14-SEP-1998;
14-SEP-1998;
14-SEP-1998;
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97WO-US005230.

98WO-US012456.

98WO-US014552.

98WO-US017888.

98WO-US01909.

98WO-US01909.

98WO-US019094.

98WO-US019094.
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system

98WO-US019330

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01-DEC-1999

01-DEC-1999

02-DEC-1999

02-DEC-1999

16-DEC-1999

20-DEC-1999

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22-DEC-1999

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13-SEP-1999;
15-SEP-1999;
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30-NOV-1999;
30-NOV-1999;
11-AUG-2000;
11-AUG-2000;
23-AUG-2000;
24-AUG-2000;
24-AUG-2000;
20-DEC-2000;
20-DE
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21-MAR-2000;
30-MAR-2000;
17-MAY-2000;
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99WO-US005028.
99WO-US005199.
2000WO-US006319.
2000WO-US006615.
99WO-US010733.
99WO-US012252.
99WO-US0201111.
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2000WO-US000277.
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98WO-US024855.
98WO-US025108.
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99WO-US030911
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25-MAY-2001;
25-MAY-2001;
25-MAY-2001;
01-JUN-2001;
01-JUN-2001;
01-JUN-2001;
14-JUN-2001;
19-JUN-2001;
20-JUN-2001;
20-JUN-2001;
20-JUN-2001;
20-JUN-2001;
20-JUN-2001;
09-JUL-2001;
18-JUL-2001;
06-AUG-2001;
19-DEC-2001;
2001US-00866028.
2001US-00866034.
2001US-00872035.
2001US-00872035.
2001US-00874503.
2001US-008874503.
2001US-00887879.
2001US-00887879.
2001US-00887879.
2001US-00887879.
2001US-0087879.
2001US-0087879.
2001US-00987879.
2001US-00987879.
2001US-009979419.
2001US-00931836.
2001US-00931836.
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(GETH) GENENTECH INC.

Gerritsen ME, Goddard Smith V, Stewart TA, Beresini M, ME, Goddard 1 A, Godow Tumas D, Deforge L, Desnoyers L, Filvaroff E, G A, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z; Gao W;

WPI; 2003-900166/82. N-PSDB; ADE21896.

Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.

Claim 12; Fig 24; 638pp; English

colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colynucleotides are useful in molecular biology, including uses as captured to the probes, in chromosome and gene mapping, in generating can by bridisation probes, in chromosome and gene mapping, in generating also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are cuseful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or conditions and in the development and screening of therapeutically useful reagents. Such as tumours, for stimulating and inhibiting proliferation of fumous modernation of adipocyte cells, for modulating the uptake of conditions to such as the properties of the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating conditions which stimulate the release of proteoglycans from cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating sports-related joint problems, carticular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassemias and conditions which massociated dista for this patent is also available in electronic format from the sequence data for this patent is also available in electronic format from the sequence data for this patent is also available in electronic format from the colon of the invention. The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TWF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours as sequence represents a human Pi sequence data for this patent the USPTO website at seqdata. at seqdata.uspto.gov.

Sequence 285 A

Query Match
Best Local Similarity
Matches 285; Conser 100.0%; ilarity 100.0%; Conservative 0; 0 Score 1451; DB 7; Pred. No. 1.3e-144; ; Mismatches 0; Length 285; Indels Gaps 0

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RESULT 162
ADD79121
ID ADD791
XX ADD791
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XX 29-JAN
XX Human;
KW Human;
KW Cancer
KW Iiver;
KW Skelet
KW Selet
KW Freuma
KW Freuma
KW Freuma
KW Freuma
KW Freuma
KW Freuma
KW Sports
KW Sports
KW Sports
KW Sports
KW Sports
KW Freuma
KW INDER
KW SPORT
KW O9-DEC
PR 09-DEC
PR 0
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                                                                                                                                                                                                                                                                                                                                                                                 Gerritsen ME, Goddar
Smith V, Stewart TA,
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01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
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DB; ADD79120.
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ME, Goddard
                                                                                                                                                                     secreted and transmembrane PRO polypeptides and nucleic for the diagnosis, prevention and/or treatment of tumors, colon, breast, prostate, rectal, cervical and/or liver
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Tumas D,
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A, Godowski PJ, Gurney AL, Sh
Tumas D, Watanabe CK, Wood WI,
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Zhang Z;
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cc invention also relates to an antibody which specifically binds to a PRO golypeptide, a method for stimulating the release of tumour necrosis cc factor-alpha (TNF-alpha) from human blood, a method for stimulating the cc proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, cc colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as comparing probes, in chromosome and gene mapping, in generating and in generating generating generating generating generating generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful creagents. The PRO polypeptides or antibodies are useful in the development and screening of therapeutically useful canting such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FRA by skeletal muscle cells, for modulating the uptake of collistic proliferation of or gene expression in pericyte cells, for stimulating creating colliferation of inner ear utricular supporting cells for stimulating the proliferation of finer ear utricular supporting cells for stimulating colliferation of inner ear utricular supporting cells, for stimulating colliferation of for treating sports related joint problems, carticular cartilage are useful for treating sports related joint problems. Compared to the second associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence data for this patent is also available in electronic format from the USPTO website at sequance soul as sequance format from the uspons the sequence format from the uspons the sequence data for this patent is also available in electronic format from the uspons the sequence data for this patent is also available in electronic format from 
   Sequence
   285
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Matches Query Match Best Local 181 121 121 285; 61 61 щ Н Similarity GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEBAPAVTAGLKIFEPPAP KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC MDDSTEREOSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLILALLSCC 100.0%; ilarity 100.0%; Conservative 0 Score 1451; DB 7; Pred. No. 1.3e-144; Mismatches 0 Length Indels 0

180

180

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60 60 Gaps

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ADE41657 standard; protein; 285

80

PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL

KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL

240 240

PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL

181 241

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entry)

PRO polypeptide #12

RESULT 163
AD541657
ID AD5416
XX AD5416
XX AD5416
XX AD5416
XX AD5416
XX Human
XX Human;
KW Human;
KW Cancer
KW Cancer
KW Cifer; Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; transmer; adrenal; lung; colon; breast; prostate; rectum; kidn liver; microvascular endothelial cell; glucose; FFA; kidney;

The invention transmembrane Claim 12; Fig

relates to iso polypeptides)

isolated hues) and the

human PRO polypeptides (secreted he polynucleotides encoding them.

24; 637pp; English.

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03-MAR-2000; 2000US-0187202P
01-DEC-2000; 2000WO-US032678
19-DEC-2001; 2001US-00028072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
                                                                                                                                                                                                            21-MAY-2002; 2002US-00152386
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(GETH ) GENENTECH INC
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Baker KP, Smith Gerritsen ME, Beresini M, ME, Goddard 1 A, Godov Tumas D, Deforge L, Desnoyers L, F: A, Godowski PJ, Gurney AL, Tumas D, Watanabe CK, Wood Wood WI, Filvaroff E, Sherwood S; Zhang 2 Gao Ξ

2003-899788/82.)B; ADE41656.

Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.

Claim 12; Fig 24; 637pp; English

The invention relates to isolated human PRO polypeptides (secreted and cransmembrane polypeptides) and the polynucleotides encoding them. The cinvention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis cractor alpha (TNP-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as comparison probes, in chromosome and gene mapping, in generating each transgenic animals or knock-out animals which are created in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are created in the development and screening of therapeutically useful cantides, such as tumours, for stimulating and inhibiting proliferation of of human microvascular endothelial cells, for modulating the upcake of cluose or FRA by skeletal muscle cells, for adipocyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for stimulating proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for stimulating endothelial cell tube formation and for treating carticular such as sports injuries and cartilage are useful for treating sports-related joint problems, cells, for stimulating cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides which as various thalassaemias and conditions which as sequence data for this patent is also available in electronic format from txprince and animals provised of the invention. This

285 ΑA;

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Query Match
Best Local Sin
Matches 285;
           Similarity
100.0%; Score 1451;
100.0%; Pred. No. 1.
tive 0; Mismatches
           .3e-144;
                     В
                    Length
                    285;
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Gaps
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δ Ś 밁 Ś 밁 Ś 밁 Ş RESULT 164 ADE17474 20-NOV-1998; 01-DEC-1998; 05-JAN-1999; Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; ostecarthritis rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; 23-OCT-2003. ADE17474 standard; protein; 285 29-OCT-1998; 29-OCT-1998; 07-OCT 16-SEP-1998 28-AUG-1998 17-APR-2002; US2003199023-A1 29-JAN-2004 14-SEP 14-SEP 14-JUL-1998 immune system cell 181 121 121 241 241 181 61 61 Н -1998 1998 1998 1998 1998 GEGNSSONSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE MDDSTEREOSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLILALLSCC PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL polypeptide #12 98WO-US022992. 98WO-US024855. 98WO-US025108. 99WO-US000106. 99WO-US005108. 99WO-US005108. 99WO-US005103. 2002US-00124821 (first entry) 98WO-US019437. 98WO-US021141. 98WO-US022991. 98W0 -0M86 98WO-US019094. 98WO-US019177. 98WO-US018824 98WO-US019093 98WO-US017888 infiltration. AA 285 ostecarthritis; 180 240 180 120 120 90 9

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Colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as comply midisation probes, in chromosome and gene mapping, in generating cantisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful creagents. The PRO polypeptides or antibodies are used in preparing a committee of the polypeptides or antibodies are used in preparing a committee of the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of collisions of proliferation of adipocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating carticular cartilage disorders such as sports injuries and carticular cartilage disorders such as sports injuries and confirming are useful for treating sports-related joint problems, proliferation of souseful for treating sports-related joint problems, processorist and useful for treating sports-related joint problems, processorist and useful for treating sports-related joint problems, processorist and manneral haemoglobin-casciated disorders such as various mammalian haemoglobin-disorders are also useful for treating various mammalian haemoglobin-sequence represents a human processor system cell infiltration. Note: The sequence data for this patent is also available in electronic format from USPTO at segdata.uspto.gov/sequence.html.
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19-DEC-2001;
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Smith V,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              invention also relates to an antibody polypeptide, a method for stimulating factor-alpha (TNF-alpha) from human bl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 12; SEQ ID NO 24; 637pp;
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N-PSDB; ADE17473.
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                          GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTTQKGSYTFVPWLLSFKRGSALEE
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Tumas
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A, Godowski PJ, Gurney AL, Sherwood
Iumas D, Watanabe CK, Wood WI, Zhang
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                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                  Score 1451; DB 7;
Pred. No. 1.3e-144;
; Mismatches 0;
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20-DEC-1999; 22-DEC-1999; 30-DEC-1999;

99WO-US030911. 99WO-US030999. 99WO-US030720. 99WO-US031243.

2000WO-US000376. 2000WO-US003565. 2000WO-US004341.

2000WO-US004342

2000WO-US005841

02-DEC-1999

99WO-US028564. 99WO-US028565. 99WO-US030095. 30-NOV-1999;

-SEP-1999;

02-JUN-2000; 28-JUL-2000; 11-AUG-2000; 23-AUG-2000; 24-AUG-2000;

10-MAY-2001 18-MAY-2001 25-MAY-2001 25-MAY-2001 01-JUN-2001 01-JUN-2001 01-JUN-2001 11-JUN-2001 11-JUN-2001 12-JUN-2001 20-JUN-2001 21-JUN-2001 21-JUN-2001

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KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL

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20-DEC-2000 28-FBB-2001 28-FBB-2001 01-MAR-2001 01-MAR-2001 14-MAR-2001 12-MAR-2001 22-MAR-2001 05-APR-2001 10-MAY-2001

2000WO-US032328
2000WO-US030952
2000WO-US030953
2000WO-US032678
2000WO-US034956
2001US-00796498
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2001US-00816744
2001US-00854280
2001US-00854280
2001US-00854280
2001US-00860216
2001US-00888263

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               99WO-US028313.
99WO-US028409.
99WO-US028301.
99WO-US028634.
99WO-US028551.
99WO-US028564.
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99WO-US020594.
99WO-US020944.
99WO-US021090.
99WO-US021547.
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                                                                       Baker KP,
Gerritsen
Smith V,
                     WPI; 2003-900164/82.
N-PSDB; ADD91605.
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                                                                       , Beresini M,
n ME, Goddard
Stewart TA,
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2001WO-US029116
2001WO-US020116
2001WO-US0211066
2001WO-US021735
2001WS-00908827
2001US-00924419
2001US-00921836
2001US-00931836
2001US-00931836
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2001WS-0080270666.
2001US-00802706.
2001US-00808689.
2001US-00828366.
2001US-00854208.
2001US-00860216.
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2000WC-US030873.

2000WC-US032678.

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2000US-00796498.
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2000WO-US020710.
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2000WO-US005004.
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99WO-US030911.
99WO-US030999.
99WO-US030720.
                                                                         A, Godov
                                                                       Deforge L, Desnoyers L, Filvaroff E, G
A, Godowski PJ, Gurney AL, Sherwood S;
Tunas D, Watanabe CK, Wood WI, Zhang Z;
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Human; secreted and transmembrane Tumour necrosis factor alpha relea

release;

protein; PRO; ase; TNF-alpha

Novel human

secreted and transmembrane protein

29-JAN-2004 (first entry)

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The invention relates to isolated human PRO polypeptides (secreted and contransmembrane polypeptides) and the polymunlectides encoding them. The convention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis contracts and a method for stimulating the release of tumour necrosis contracts and a method for stimulating the prosence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as complying the preparing PRO polypeptides by recombinant techniques and in generating experience RNA and DNA and in gene therapy. The polymucleotides may also be useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polymeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of fuman microvascular endothelial cells, for modulating the uptake of glucose or FRA by skeletal muscle cells, for adipocyte cells, for stimulating conditions are supporting and individual stimulating and individual stimulating conditions are supported to the proliferation of or gene expression in pericyte cells, for stimulating cells or T-lymphocyte cells, for stimulating cells or modulating the uptake of cells or modulating the uptake of cells, for inducing endothelial cell tube formation and for treating are useful for treating sports related joint problems, are proposed and cartilage disorders such as sports injuries and cells, for stimulating cells or T-lymphocyte cells, for stimulating for articular supporting sports related joint problems, sports and proposed disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence data for this pacent is also available in electronic format from texture supports and the cells of the invention. Note:
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Query Match Best Local (Matches Similarity 285 AA; Conservative 100.0%; 0; Score 1451; DB 7; Pred. No. 1.3e-144; Length 285,;

밁 Ś δõ 밁 밁 8 밁 241 181 181 121 121 61 61 GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFXRGSALEE MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP MDDSTEREOSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLILLALLSCC Mismatches **QRKKVHVFGDELSLVTLFRCIQNMPETL** Indels 0; 240 60

XXXX RESULT 166 ADE33069 standard; protein; 285

> 02-JUN-1999; 25-AUG-1999; 30-MAR-2000; 01-DEC-2000; 19-DEC-2001; glucose uptake modulator; FFA uptake modulator; cell proliferation stimulator; cell differentiation stimulator; cell differentiation inhibitor; cytokine release stimulator; tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; cervical tumour; liver tumour; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker. Gerritsen ME, Smith V, Ste 16-OCT-2003 26-AUG-1998; 16-MAY-2002; 2002US-00147497. (GETH) GENENTECH INC Beresini M, ME, Goddard ; 99WO-US012252. ; 99US-00380137. ; 2000WO-US008439. ; 2000WO-US032678. ; 2001US-00028072. 98US-0097951P i A, Godov Tumas D, Deforge L, Desnoyers L, F A, Godowski PJ, Gurney AL, Filvaroff E, Sherwood დ •--Gao Σ

Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis. Stewart TA, Watanabe CK, Wood WI,

Claim 12; SEQ ID NO 24; 636pp; English.

The invention describes 305 nucleic acids encoding PRO (secreted and Cransmembrane) polypeptides (I). (I) is useful for stimulating the cretease of TNF-alpha from human blood, for modulating the uptake of C glucose or FFA by skeletal muscle cells or adipocyte cells, for Stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of for inhibiting the binding of the release of a cytokine from PBMC cells, for inhibiting the binding of the peptide to factor VIIA, for inhibiting the differentiation of adipocyte cells, for stimulating the proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour. The oligonuclectide probes are useful for isolating genomic and cDNA nucleotide sequences or can describe probes. (I) is also useful as therapeutic agent. PRO is useful in assays to identify other process or molecules involved in binding in generation of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and conductive procession of propersion of procession in generating transgenic animals or chromosome identification, as chromosome marker, and for generating conductive purification, as chromosome marker, and for generating conductive purification of PRO from recombinant cells, the amino acid sequence of a novel human secreted and transmembrane PRO

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Best Local Similarity
Matches 285; Conserv
11-JUN-1997
12-JUN-1998
14-JUL-1998
28-AUG-1998
10-SEP-1998
14-SEP-1998
14-SEP-1998
14-SEP-1998
17-SEP-1998
17-SEP-1998
17-SEP-1998
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10-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; secreted and transmembrane protein; PRO;
Tumour necrosis factor alpha release; TNF-alpha release;
glucose uptake modulator; FPA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumour;
lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
cervical tumour; liver tumour; chromosome mapping; gene mapping;
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98WO-US014552.
98WO-US017888.
98WO-US018824.
98WO-US019093.
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0-US022991.
0-US022992.
0-US024855.
0-US025108.
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0-US005190.
0-US0063190.
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Pred. No. 1.3e-144;
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11-SEP 1999
13-SEP 1999
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2001US-00796498.
2001WO-US006520.
2001WO-US006666.
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2000WO-US000217.
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2000WO-US00341.
2000WO-US004341.
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2001US-00874503.
2001US-00886342.
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2001US-00887879.
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2001US-00808689.
2001US-00816744.
2001US-00828366.
2001US-00854208.
2001US-00854280.
2001US-00860216.
2001US-00866028.
2001US-00866038.
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2000WO-US014941.

2000WO-US015264.

2000WO-US020710.

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2000WO-US023522.

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2000WO-US0330952.

2000WO-US030953.

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99WO-USO28301.
99WO-USO28634.
99WO-USO28551.
99WO-USO28564.
99WO-USO30995.
99WO-USO30991.
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The invention describes 305 nucleic acids encoding PRO (secreted and CC transmembrane) polypeptides (I). (I) is useful for stimulating the CC release of TNF-alpha from human blood, for modulating the uptake of CC glucose or FFA by skeletal muscle cells or adipocyte cells, for CC glucose or FFA by skeletal muscle cells or adipocyte cells, for CC stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of f-lymphocyte cells, for stimulating the proliferation of f-lymphocyte cells, for stimulating the proliferation of f-lymphocyte cells, for detecting the release of a cytokine from PBMC cells, for inhibiting the binding of the presence of tumour in amammal. The tumour is lumg, colon, breast, cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in amammal. The tumour is lumg, colon, breast, cells, for isolating genomic and cDNA nucleotide sequences or centered useful for isolating genomic and cDNA nucleotide sequences or centered gene mapping, in generation of antisense RNA and DNA, in the core paration of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and certamentary is separating the sequence of affinity purification, as chromosome marker, and for generating cells, classes or serum, and for caffed sequences. (I) and (II) are useful for tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO
                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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Best Local
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09-JUL-2001;
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Smith V,
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KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                                                      GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVFWLLSFKRGSALEE
                                                                                        GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE
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ME, Goddard
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2001WO-US021735.
2001WO-US090887.
2001US-00924419.
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2001US-00031887.
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Tumas
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z
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Pred. No. 1.3e-144;
; Mismatches 0;
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                       12-APR-1999
12-MV 1999
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01-SEP-1999
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15-CCT-1999
29-NOV-1999
30-NOV-1999
30-NOV-1999
31-DEC-1999
01-DEC-1999
02-DEC-1999
02-DEC-1999
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10-MAR-1999;
10-MAR-1999;
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17-SEP-1998;
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                                                                      99WO-US028214.
99WO-US028313.
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99WO-US028634.
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99WO-US000106.
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98WO-US019093.
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22-MAR-2001

05-APR-2001

10-MAY-2001

110-MAY-2001

118-MAY-2001

25-MAY-2001

25-MAY-2001

25-MAY-2001

01-UUN-2001

01-UUN-2001

119-JUN-2001

119-JUN-2001

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21-JUN-2001

21-JUN-2001
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22 - DEC-1999
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05 - JAN-2000
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16 - FEB-2000
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18 - FEB-2000
24 - FEB-2000
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07 - MAR-2000
07 - MAR-2000
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20-DEC-2000
20-DEC-2000
28-FEB-2001
28-FEB-2001
01-MAR-2001
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20-JUN-2000

20-JUL-2000

11-AUG-2000

21-AUG-2000

24-AUG-2000

08-NOV-2000

10-NOV-2000
New PRO nucleic acid, useful for manufacturing a medicament for
                            WPI;
                                                     Gerritsen
                                                                              (GETH ) GENENTECH INC.
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                  2003-875867/81
DB; ADD79672.
                                           Beresini M,
ME, Goddard
Stewart TA,
                                                                                                       2001WO-US021066.

2001WO-US021735.

2001US-00908827.

2001US-00924419.

2001US-00927796.

2001US-00931836.
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2001US-00874503
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2001WO-US021066
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99WO-US030999
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Tumas
                                           Deforge L, Desnoyers L, F
A, Godowski PJ, Gurney AL,
Tumas D, Watanabe CK, Wood
                                            Wood WI,
                                           Filvaroff E, Ga
AL, Sherwood S;
cod WI, Zhang Z;
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Gao W;

ADE34544

ADE34544 standard;

protein;

285 AA

ADE34544; 29-JAN-2004

(first entry

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Matches 285
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 285
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                                                                                           PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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                                                                                                                                                        KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
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Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 7;
L.3e-144;
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Human B-Lymphocyte stimulator #SEQ ID

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Matches 285
                                                                                                                                                                                                                                                                                                                                         modulates the activity of a gene or protein associated with rheumatoid arthritis. The method of the invention comprises providing a cell expressing a gene or protein associated with rheumatoid arthritis, contacting the cell with a test compound, and determining whether the test compound modulates the activity of the gene or protein. The method of the invention is useful for preparing a composition for treating rheumatoid arthritis. Sequences given in ADE34597 and ADE34597 represents genes and proteins associated with rhematoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Identifying a compound that modulates the activity of rheumatoid arthritis-associated gene or protein by determining whether the compound modulates the activity of the gene or protein expressed
                                                                                                                                                                                                                                                                                                                  Sequence
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NADLER S G.
BOWEN M.
NEUBAUER M.
LU P.
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                                                                                                      GEGNSSONSRNKRAVQGPEET
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                         PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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Pred. No. 1.3e-144;
Mismatches 0;
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tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrehal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFR; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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Smith V, Stewart
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19-DEC-2001;
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DB; ADD92709.
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ME, Goddard
Stewart TA,
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2000WO-US032678.
2001US-00028072.
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A, Godowski PJ, Gurney AL, Sh
Tumas D, Watanabe CK, Wood WI,
                                                                                                                                                                                                                                                                                                                                                  Filvaroff E,
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Two hundred and seventy five nucleic acids encoding PRO I useful for treating pericyte-associated tumors, diabetes and/or cartilage disorders, e.g. arthritis. PRO polypeptides, betes and various bone

Gao Ξ

Claim 12; SEQ ID NO 24; 636pp; English.

continuents of the control of the co invention relates to isolated human PRO polypeptides (secreted

PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL

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ARESULT 171
ARE19130
ID ADE191
XX ADE191
AC ADE191
XX 29-JAN
XX 29-JAN
XX Human;
XW tumoux
KW tumoux
KW tumour
KW cancer
KW liver;
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cerlliver; microvascular endothelial cell; glucose; FPA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthr; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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associated disorders such as various thalassaemias and conditions which
may benefit from enhanced local immune system cell infiltration. This
sequence represents a human PRO polypeptide of the invention. Note: The
sequence data for this patent is also available in electronic format fro
USPTO at seqdata.uspto.gov/sequence.html.
   Baker KP, Beresini M,
Gerritsen ME, Goddard
Smith V, Stewart TA,
                                                                                                                                                                             03-MAR-2000; 2000US-0187202P.
10-NCV-2000; 2000WO-US030873.
01-DEC-2000; 2000WO-US033878.
19-DEC-2001; 2001US-00028072.
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100.0%; Pred. No. 1.3e-144;
tive 0; Mismatches 0;
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   1 A, Godov
Tumas D,
Deforge L, Desnoyers L, Filvaroff E, G
A, Godowski PJ, Gurney AL, Sherwood S;
Iumas D, Watanabe CK, Wood WI, Zhang Z;
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                            2003-900156/82
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Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.

Claim 12; SEQ ID NO 24; 648pp; English

CC detecting the presence of a tumour in a manual (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polynucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating CC annisence RNA and DNA and in gene therapy. The polynucleotides may also CC be useful in the development and screening of therapeutically useful CC reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating at inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of CC glucose or FFA by skeletal muscle cells, for modulating proliferation of or gene expression in pericyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating cells, for inducing endothelial cell tube formation and for treating correctly colls, for inducing endothelial cell tube formation and for treating correctly cells or Telymphocyte cells, for stimulating correctly cells, for stimulating correctly cells or Telymphocyte cells, for modulating endothelial cell tube formation and for treating correctly cells or Telymphocyte cells, for stimulating correctly cells or Telymphocyte cells, for stimulating correctly cells or Telymphocyte cells, for stimulating correctly cells, for stimulating correctly cells, for stimulating correctly cells, for stimulating cells or Telymphocyte cells, for treating cells or Telymphocyte cells, for stimulating cells or Telymphocyte cells, for treating cells or Telymphocyte cells, for stimulating cells or Telymphocyte ce The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for

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                         PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                                KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
 PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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100.0%; Pred. No. 1.3e-144;
tive 0; Mismatches 0;
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RESULT 172 ADE18578

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The invention relates to isolated human PRO polypeptides (secreted and CC transmembrane polypeptides) and the polynucleotides encoding them. The CC invention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the ground of tumour necrosis CC polynucleotides are useful in molecular biology, including uses as CC polynucleotides are useful in molecular biology, including uses as CC polynucleotides, in chromosome and gene mapping, in generating CC polynucleotides mad DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in CC generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful CC reagents. The PRO polypeptides or antibodies are used in preparing a CC medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of conditions are proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating conditions bone and/or carrilage disorders such as sports injuries and conditions bone and/or carrilage disorders such as sports injuries and conditions. PRO articular carrilage defects, osteoarthritis and rheumatoid arthritis. PRO
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01-DEC-2000;
19-DEC-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various and/or cartilage disorders, e.g. arthritis.
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Stewart TA, Tumas
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2000WO-US032678.
2001US-00028072.
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Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; to-alpha; tumour; cancer; adrenal; lung; colon; breest; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; P-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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05-JUN-2000; 01-DEC-2000; 19-DEC-2001;

2000US-0209832P 2000WO-US032678 2001US-00028072

(GETH)

GENENTECH

INC

28-MAY-2002; 2002US-00156845

Baker KP, Beresini M, Gerritsen ME, Goddard Smith V, Stewart TA,

Deforge L, Desnoyers L, A, Godowski PJ, Gurney J Tumas D, Watanabe CK, W

y AL, Sh Wood WI,

Pilvaroff E, Gau AL, Sherwood S; Thang Z;

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29-JAN-2004 (first entry)

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WPI; 2003-900162/82.
N-PSDB; ADE42773.
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Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.

12; Fig 24; 636pp; English.

useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FPA by skeletal muscle cells, or addipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating proliferation of inner ear utricular supporting cells for T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating shorts in a proteoglycans. from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours) polypurcleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polypucleotides may als be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for seqdata.uspto.gov/sequence.html also

Sequence 285 A.

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Best Local :
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                                                                                                                  GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWILLSFKRGSALEE
PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
                                                             KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL
                                                                                               GEGNSSONSRNKRAVOGPEETVTODCLOLIADSETPTTOKGSYTFVPWLLSFKRGSALEE
                                                                                                                                                     LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                                                         LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP
                                                                                                                                                                                                             MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
                                                                                                                                                                                                                                 MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC
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                                                                                                                                                                                                                                                                  100.0%; Score 1451; DB 7; 100.0%; Pred. No. 1.3e-144; tive 0; Mismatches 0;
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             285
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RESULT 174
ADD95563
ID ADD955

ADD95563 standard; protein;

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29-OCT-1998
20-NOV-1998
20-NOV-1998
20-NOV-1998
01-DEC-1999
08-MAR-1999
110-MAR-1999
110-MAR-199
110-MAR-199
110-MAR-199
110-MAR-199
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12-JUN-1998;
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  ; 2000WO-US000219.
; 2000WO-US000277.
; 2000WO-US000376.
; 2000WO-US003565.
; 2000WO-US004341.
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2000WO-US006319.
99WO-US008615.
99WO-US010733.
99WO-US012252.
99WO-US020111.
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99WO-US028409.
99WO-US028301.
99WO-US028634.
99WO-US028654.
99WO-US028564.
99WO-US028565.
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98WO-US024855.
98WO-US025108.
99WO-US005028.
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99WO-US030911.
99WO-US030999.
99WO-US030720.
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99WO-US023089.
99WO-US028214.
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99WO-US020944.
99WO-US021090.
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98WO-US022991
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98WO-US019330
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98WO-US019093
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18-FEB-2000; 2000WO-USO04342.
22-FEB-2000; 2000WO-USO04414.
24-FEB-2000; 2000WO-USO05004.
21-FEB-2000; 2000WO-USO05601.
22-MAR-2000; 2000WO-USO05844.
20-MAR-2000; 2000WO-US005844.
20-MAR-2000; 2000WO-US00757.
21-MAR-2000; 2000WO-US0014042.
20-MAR-2000; 2000WO-US014042.
20-MAR-2000; 2000WO-US014042.
20-MAR-2000; 2000WO-US014044.
20-MAY-2000; 2000WO-US014044.
20-JUL-2000; 2000WO-US013705.
21-MAY-2000; 2000WO-US013705.
21-MAY-2000; 2000WO-US020710.
21-MAR-2000; 2000WO-US023528.
24-MUG-2000; 2000WO-US023528.
26-MAY-2001; 2000WO-US032678.
20-DEC-2000; 2000WO-US032678.
20-DEC-2001; 2001US-00866028.
20-MAY-2001; 2001US-00866028.
20-MAY-2001; 2001US-00866028.
20-MAY-2001; 2001US-00866028.
20-MAY-2001; 2001US-00866028.
20-MAY-2001; 2001US-00866038.
20-MAY
The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the
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Gerritsen ME, Goddard
Smith V, Stewart TA,
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)B; ADD95562.
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Tumas
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A, Godowski PJ, Gurney AL, She
Tumas D, Watanabe CK, Wood WI,
                                                                                                                                                                  English.
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L, Sherwood
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ID ADE224
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ADE224
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                                                                                                                                                                                                                 polypeptide
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Indels Length

0;

Gaps

60

240 240 180

120

180

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Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorders.
                                                                                                                                                                                                                                                      tumour;
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disorder;

WPI; 200

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31-MAR-1997; 97WO-US005230.
12-UUL-1998; 98WO-US012456.
14-UUL-1998; 98WO-US012456.
10-EEP-1998; 98WO-US01904.
14-SEP-1998; 98WO-US01904.
14-SEP-1998; 98WO-US019330.
17-SEP-1998; 98WO-US01937.
16-SEP-1998; 98WO-US019437.
17-SEP-1998; 98WO-US019437.
17-SEP-1998; 98WO-US019437.
17-SEP-1998; 98WO-US019485.
10-DEC-1998; 98WO-US02590.
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10-MAR-1999; 99WO-US005100.
10-MAR-1999; 99WO-US005100.
11-SEP-1999; 99WO-US006319.
11-SEP-1999; 99WO-US006319.
12-SEP-1999; 99WO-US001063.
13-SEP-1999; 99WO-US001063.
14-MAY-1999; 99WO-US001063.
15-SEP-1999; 99WO-US001073.
16-DEC-1999; 99WO-US021547.
16-DEC-1999; 99WO-US0228564.
10-DEC-1999; 99WO-US0228566.
10-DEC-1999; 99WO-US0203099.
10-WAR-2000; 2000WO-US000377.
10-WAR-2000; 2000WO-US0004414.
24-FEB-2000; 2000WO-US005864.
10-WAR-2000; 2000WO-US005864.
10-WAR-2000; 2000WO-US005868.
10-WAR-2000; 2000WO-US0058884.
10-WAR-2000; 2000WO-US006884.
10-WAR-2000; 2000WO-US006884.
10-WAR-2000; 2000WO-US007377.
10-WAR-2000; 2000WO-US007377.
10-WAR-2000; 2000WO-US00744.
11-EB-2000; 2000WO-US00744.
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28-JUL-2000;
21-AUG-2000;
21-AUG-2000;
22-AUG-2000;
20-DEC-2000;
20-DEC-2000;
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20-DEC-2001;
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21-MAR-2001;
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22-MAR-2001;
21-MAY-2001;
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21-MAY-2001;
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2000WO-US030523
2000WO-US030673
2000WO-US032678
2000WO-US036566
2001WO-US006566
2001WO-US006566
2001US-00806692
2001US-00854280
2001US-00854280
2001US-00854280
2001US-008560216
2001US-008660216
2001US-008660216
2001US-00866034
2001US-00872035
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2000WO-US020710
2000WO-US022031
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Baker KP, Beresini M Gerritsen ME, Goddarv Smith V, Stewart TA, Beresini M, Æ, Goddard l A, Godows Tumas D, Deforge L, Desnoyers L, Filvaroff E, G A, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z; Gao Z

WPI; 2003-900169/82. N-PSDB; ADE22448.

Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various and/or cartilage disorders, e.g. arthritis.

12; £ig 24; 638pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The CC invention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis CC polypeptide, a method for stimulating the release of tumour necrosis CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung, CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in meammal (e.g. adrenal, lung, CC hybridisation probes, in chromosome and gene mapping, in generating CC antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing RNO polypeptides by recombinant techniques and in CC generating either transgenic animals or knock-out animals which are cuseful in the development and screening of therapeutically useful cantibodies. Such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for

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RESULT
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78567
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                                                                                                                                                                                                    Human; PRO; secreted polypeptide; transmembrane polypeptide; trumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disord sports injury; proteoglycan; articular cartilage defect; osteoar rheumatoid arthritis; haemoglobin-associated disorder thalassaem
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05-JUN-2000;
01-DEC-2000;
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Baker KP, Beresini M,
Gerritsen ME, Goddard
Smith V, Stewart TA,
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A, Godowski PJ, Gurney J
Tumas D, Watanabe CK, W
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such New isolated, acids, useful as lung, colon, breast, secreted and transmembrane PRO polypeptides and nucleic for the diagnosis, prevention and/or treatment of tumors colon, breast, prostate, rectal, cervical and/or liver liver

Claim 12; Fig 637pp; English

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypucleotides encoding them. The cinvention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis cated the prosence of a stimulating the release of tumour necrosis cated the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as comparing pRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are cused in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are cused in the development and screening of therapeutically useful cantibodies, such as tumours, for stimulating and inhibiting proliferation of or gene expression in periodies are used in preparing a condition responsive to the polypeptides or stimulating and inhibiting proliferation of spene expression in periodyte cells, for stimulating proliferation of or gene expression in periodyte cells, for stimulating cells or stimulating to tracting expression in periodyte cells, for stimulating cells or stating cells or stimulating cells or stating cells o

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ilarity 100.0%;
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RESULT 177
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ID 32517
ID 32517
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XX US2003
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XX US2003
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XX I6-OCI
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PF 14-MA;
XX O5-JU
PF 14-MA;
XX O5-JU
PF 19-DE(
PR 19-D
The invention describes 305 nucleic acids encoding PRO (secreted and CC transmembrane) polypeptides (I). (I) is useful for stimulating the crelease of TNF-alpha from human blood, for modulating the uptake of CC glucose or FFA by skeletal muscle cells or adipocyte cells, for Stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the release of proteoglycans from cartilage, for Stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of Trymphocyte cells, for stimulating the proliferation of Trymphocyte cells, for stimulating of the proliferation of Trymphocyte cells, for stimulating of the prelease of a cytokine from PBMC cells, for inhibiting the binding of CR -peptide to factor VIIA, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes are useful for isolating genomic and cDNA, nucleotide sequences or are useful for isolating genomic and cDNA nucleotide sequences or cartisense probes. (I) is also useful as therapeutic agent. PRO is useful in theraction. A polynucleotide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the CC preparation of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and
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19-DEC-2001;
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Tumour necrosis factor alpha release; TWF-alpha release;
glucose uptake modulator; FFA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumour;
lung tumour; colon tumour; breast tumour; prostate tumour; rectal tum
cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.
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A, Godowski PJ, Gurney AL, Sherwood S;
Iumas D, Watanabe CK, Wood WI, Zhang Z
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                                                                             03-MAR-2000; 2000US-0187202P
01-DEC-2000; 2000WO-US032678
19-DEC-2001; 2001US-00028072
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                                                                                                                                          28-MAY-2002; 2002US-00156844
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   Beresini M, ME, Goddard
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PJ, Gurney AL,
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L, Sherwood S;
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Smith V, Stewart TA,

2003-900161/82

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detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as comparing the proposed of the mapping, in generating and the polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in comparating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful creagents. The PRO polypeptides or antibodies are used in preparing a commence of the proposed proposed or antibodies are used in preparing a commission of human microvascular endothelial cells, for modulating the uptake of complete of the proliferation of or gene expression in pericyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and cartilage dare useful for treating sports-related joint problems, articular cartilage disorders such as sports injuries and carticular suppoperides are also useful for treating various mammalian haemoglobin-carticular supports and conditions which may benefit from enhanced local immune system cell infiltration. Note: The sequence data for this patent is also available in electronic format from useful colon sequence human proposed the proposed to the prop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              proliferation or differentiation of chondrocyte cells and a method
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13-SEP-1999
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14-MAY-1999;
02-JUN-1999;
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07-OCT-1998;
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20-NOV-1998;
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14-JUL-1998;
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99WO-USO28301
99WO-USO28531
99WO-USO28554
99WO-USO28564
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99WO-USO30095
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98WO-US018824. 98WO-US019093. 98WO-US019094.

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98WO-US019330. 98WO-US019437.

98WO-US019177

98WO-US024855 98WO-US025108

99WO-US005190 99WO-US005028 Sn-OM66 98WO-US012456. 98WO-US014552. 98WO-US017888.

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Similarity

99WO-US021547. 99WO-US023089. 99WO-US028214.

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99WO-US020594. 99WO-US020944. 99WO-US021090.

99WO-US010733. 99WO-US012252. 99WO-US020111.

Sequence

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Gerritsen ME, Goddard
Smith V, Stewart TA,
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
              tumor,
         for manufacturing a medicament, for chromosome mapping or for
            for
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO

Claim

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English

Ś 밁 Ś 밁 Š 밁 δ 뫄 Ś of human microvascular endothelial cells, for modulating the uptake of CC glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating CC stimulating differentiation of adipocyte cells, for stimulating CC proliferation of or gene expression in pericyte cells, for stimulating CC the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating CC various bone and/or cartilage disorders such as sports injuries and CC artifitis. PRO polypeptides which stimulate the release of proceoglycans CC trom cartilage are useful for treating sports-related joint problems, CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-cassociated disorders such as various thalassaenias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from the content of the sequence of the sequence and sequence are sequenced and sequence are sequenced and sequence are sequenced at sequence are sequenced and sequence are sequenced at sequence are sequenced as a sequenced and sequenced are sequenced as a sequence and sequenced are sequenced as sequenced and sequenced sequenced as sequ Matches Query Match antisense RNA and DNA and in gene therapy. The polynucleotides may a be used in preparing PRO polypeptides by recombinant techniques and generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides of antibodies, such as tumours, for stimulating and inhibiting prolifer of human microvascular endothelial cells, for modulating the uptake polypeptide, a method for stimulating the release of tumou factor-alpha (TNF-alpha) from human blood, a method for st proliferation or differentiation of chondrocyte cells and detecting the presence of a tumour in a mammal (e.g. adrer colon, breast processors) Sequence colon, breast, prostate, rectal, polynuclectides are useful in monybridisation probes, in chromose antisense RNA and DNA and in gen Local 181 181 121 241 121 285; 61 61 μ. Similarity GEGNSSONSRNKRAVOGPEETVTODCLOLIADSETPTIOKGSYTFVFWLLSFKRGSALEE LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEBAPAVTAGLKIFEPPAP MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL KENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETL GEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFVPWLLSFKRGSALEE LTVVSFYQVAALQGDLASLRAELQGHHAEKLPAGAGAPKAGLEEAPAVTAGLKIFEPPAP MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC 285 100.0%; ilarity 100.0%; Conservative 0, À, te, rectal, kidney, cervical and liver tumours, seful in molecular biology, including uses as in chromosome and gene mapping, in generating in chromosome and sene mapping in generating the chromosome may a 0 Score 1451; DB 7; Pred. No. 1.3e-144; ; Mismatches 0; (e.g. adrenal, lung, cal and liver tumours). Indels Length tumour stimulating 285; a method 0, proliferation e_uptake of Gaps lfor o a also ä the 240 240 180 60 60 The 180 120 120 0

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PNNSCYSAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKLL
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ADD89253
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            standard;
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29-JAN-2004

(first entry

PRO

polypeptide

#12

RESULT 180
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Human
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XW Human;
XW tumoux
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KW liver;
KW Skelet Human; PRO; secreted polypeptide; transmembrane polypeptide; trumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumou cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; liver; microvascular endothelial cell; glucose; FFA; cervix;

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The invention relates to isolated human PRO polypeptides (secreted and CC transmembrane polypeptides) and the polynuclectides encoding them. The cinvention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the prosing the presence of a tumour in a mammal (e.g. adrenal, lung, CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polynucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating CC entisence RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are CC useful in the development and screening of therapeutically useful are propagated as tumours, for stimulating and inhibiting proliferation of fundant microvascular endothelial cells, for modulating the uptake of CC glucose or FPA by skeletal muscle cells, for adipocyte cells, for stimulating CC enlis, for inducing endothelial cells or adipocyte cells, for stimulating CC enlis for inducing endothelial cell tube formation and for treating CC enlis. For stimulating endothelial cell tube formation and for treating CC articular cartilage defects, osteoarthritis and rheumacoid arthritis. PRO polypeptides which stimulate the release of proteoglycans of from cartilage defects, osteoarthritis and rheumacoid arthritis. PRO colorated disorders such as various thalassaemias and conditions which consisted disorders such as various thalassaemias and conditions which consisted disorders such as various thalassaemias and conditions which consisted disorders are also useful for treating sports related joint problems, consisted disorders and conditions which the sequence represents a human PRO polypeptide of the invention. This sequence represents a human PRO polypeptide of the inven
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Smith V,
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Æ, Goddard
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2000WO-US032678.
2001US-00028072.
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Tumas
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A, Godowski PJ, Gurney AL, Sh
Tumas D, Watanabe CK, Wood WI,
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Query Match

Local

Similarity

100.0%; ilarity 100.0%; Conservative (

0;

Score 1451; DB 7; Pred. No. 1.3e-144; ; Mismatches 0;

Length

285; 0

Claim

12;

F19

24;

637pp;

English

Gaps

0

The invention relates to isolated human PRO polypeptides (secreted transmembrane polypeptides) and the polynucleotides encoding them. Itransmembrane polypeptides) and the polynucleotides encoding them invention also relates to an antibody which specifically binds to a polypeptide, a method for stimulating the release of tumour necrosi

to a PRO

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ADE40537
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XX Human
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01-DEC-2000;
19-DEC-2001;
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Smith V,
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                                                                                                                    Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.
                                                                                                                                                                                                                                                                            Baker KP,
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1 ME, Goddard i
Stewart TA,
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Tumas D, Wat
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ski PJ, Gurney AL, Sh
Watanabe CK, Wood WI,
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Sherwood S;
Zhang Z;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CC polynucleotides are useful in molecular biology, including uses as CC hybridisation probes, in chromosome and gene mapping, in generating CC antisense RNA and DNA and in gene therapy. The polynucleotides may also CC be used in preparing PRO polypeptides by recombinant techniques and in Generating either transgenic animals or knock-out animals which are CC useful in the development and screening of therapeutically useful CC reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of CC glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating CC stimulating differentiation of adipocyte cells, for stimulating CC stimulating differentiation of adipocyte cells, for stimulating CC cells, for inducing endothelial cell tube formation and for treating cells or T-lymphocyte CC cells, for inducing endothelial cell tube formation and for treating CC arthritis. PRO polypeptides which stimulate the release of proteoglycans CC from cartilage are useful for treating sports-related joint problems, CC associated disorders such as various thalassaemias and conditions which CC associated disorders such as various thalassaemias and conditions which CC associated disorders such as various thalassaemias and conditions which CC sequence data for this patent is also available in electronic format from CC USPTO at sequence septement is also available in electronic format from CC USPTO at sequence septement is also available in electronic format from CC USPTO at sequence and conditions of the invention.
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Human; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumou cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
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                                                                                                                                                                                           PRO polypeptide #12.
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1 MDDSTEREQSRLTSCLKKREEMKLKECVSILPRKESPSVRSSKDGKLLAATLLLALLSCC 60

Matches Query Match Best Local (Sequence

Similarity

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Score 1451; DB 7; Pred. No. 1.3e-144; ; Mismatches 0;

Indels Length

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Conservative

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The invention relates to isolated human PRO polypeptides (secreted and Ct transmembrane polypeptides) and the polypucleotides encoding them. The Ct invention also relates to an antibody which specifically binds to a PRO CC polypeptide, a method for stimulating the release of tumour necrosis Cf factor-alpha (TWP-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, Cc colon, breast, prostate, rectal, kidney, cervical and liver tumours). The CC polynucleotides are useful in molecular biology, including uses as CC antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are CC useful in the development and screening of therapeutically useful call which are conditioned to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of or gene expression in pericyte cells, for stimulating call ferentiation of adipocyte cells, for stimulating the uptake of CC glucose or FRA by skeletal muscle cells or adipocyte cells, for stimulating call ferentiation of fadipocyte cells, for stimulating cartilage are useful in tube formation and for treating cartilage are useful for treating sports related joint problems, cor promoted by skeletal muscle cells or adipocyte cells, for stimulating cells for stimulating cells or T-lymphocyte cells, for stimulating cells or T-lymphocyte cells, for stimulating cells or treating sports related joint problems, such as such as sports injuries and carticular cartilage defects, osteoarthritis and theumatoin arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which has sequence data for this patent is also available in electronic format from USFTO at sequence data for this patent is also available in electronic format from the color of the color of the color of t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.
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